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THE UNIVERSITY OF ALBERTA

DECENTRALIZED SCHOOL BUDGETING IN ALBERTA: AN ANALYSIS OF OBJECTIVES, ADOPTION, OPERATION AND PERCEIVED OUTCOMES IN SELECTED SCHOOL SYSTEMS

by

© BRIAN JOHN CALDWELL

A THESIS

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "DECENTRALIZED SCHOOL BUDGETING IN ALBERTA: AN ANALYSIS OF OBJECTIVES, ADOPTION, OPERATION AND PERCEIVED OUTCOMES IN SELECTED SCHOOL SYSTEMS," submitted by BRIAN JOHN CALDWELL in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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Date October 7, 1977

ABSTRACT

The purpose of the study was to investigate the nature, objectives, adoption, operation, and perceived outcomes of decentralized school budgeting in Alberta. A framework for the study was derived from the concepts of decentralization, organizational change, and budgeting, and from a review of literature related generally to decentralization within local school systems and the limited amount of material available which focused on decentralized school budgeting. Decentralized school budgeting was conceptualized as a form of administrative decentralization and defined as the systematic and consistent delegation, from central office to the school, of authority to make budget decisions.

The first stage of the study was a survey of all school systems to determine the nature and extent of the practice. A questionnaire mailed to all Superintendents sought perceptions of the distribution of authority between central office and the school. Two scales were developed for the questionnaire: (1) School Budget Authority Scale (SBAS) concerned with decisions related to the preparation of budgets, and (2) Operational Flexibility Scale (OFS) concerned with decisions related to the administration of budgets. The degree of decentralized school budgeting was determined by calculating the total number of budget items (SBAS) or budget transfers (OFS) for which decisions had been delegated to the school level. The first stage also included an analysis of provincial statutes and regulations along with policy statements of The Alberta Teachers' Association and the Alberta School Trustees'

Association to determine the political-legal factors which were perceived to constrain the practice.

It was found that practice in Alberta was relatively highly controlled and centralized, especially with respect to certificated and non-certificated staff and capital outlay. The variables of type, size, and dispersion of system accounted for little of the variance among systems on the different scales.

The second stage of the investigation consisted of case studies in seven school systems selected using data gathered in the first stage. Each had a relatively high degree of decentralized school budgeting, operationally defined as scoring at the seventy-fifth percentile or higher on either or both of the SBAS and OFS. Semi-structured interviews were conducted in each system with central office administrators influential in school budgeting and a sample of principals. This stage focused on: (1) objectives, (2) process of organizational change, (3) problems of implementation and operation, (4) operational procedures, (5) perceived effect of decentralized school budgeting on the frequency and severity of disagreements related to budgeting, (6) perceptions of the extent to which objectives have been attained, (7) preferences for change, and (8) extent of satisfaction with the practice.

The findings suggested that the adoption of the practice involves much more than a structural change in the location at which budgets are prepared and/or administered. The change was found to have important and interdependent consequences for the task, personnel, and technology aspects of school system operations. Recommendations for further

research and for the administration of school systems which have implemented or are considering the implementation of a form of decentralized school budgeting were derived from these findings.

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Scores of school system personnel contributed in each of the two stages of the study along with representatives of the Alberta Teachers' Association, Alberta School Trustees' Association and the Department of Education. The assistance of Mr. Alan Parry of the Edmonton Public system and Mr. Stephen Keddie of the Calgary Public system is especially acknowledged.

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Chapter 1

INTRODUCTION

The last decade has seen significant trends in both centralization and decentralization of public education in Canada. Greater control of funding by provincial governments has been a major centralizing trend while increased delegation of authority to school boards to make curriculum decisions has been an opposite decentralizing tendency.

This study was undertaken in the context of decentralization within local school jurisdictions, from the central office to the school level, in the province of Alberta, with the primary focus being the delegation of decision-making in budgeting.

This chapter contains a summary of trends in decentralization within local school jurisdictions and establishes the need for the study, the purpose of which is provided along with a statement of the problem for research and the definitions of key terms. The significance of the investigation in terms of its contribution to the development of theory and to the administration of education is outlined.

Trends in Decentralization

Decentralization of decision-making to the school level is currently a matter of international interest and concern. Morphet, Johns, and Reller (1974:345), writing of trends in education in the United States, asserted that "no concept is receiving more widespread approval in this decade than decentralization." Ornstein, et al.

(1975:125) reported that fifty of sixty-nine school districts with enrolments in excess of 50,000 students had decentralized or had made plans to do so, mainly through area units of administration and increased delegation to the school level, but also, to a lesser extent, through increased community control. A growing body of literature describes the trend in the United States from a district-oriented to a school-based management system, which South (1976:163) indicated entails:

> . . . a complete change in organization structure, organization relationships, organization values, reward systems, and major organization processes, such as planning, budgeting, and resource allocation.

Holdaway (1975:2) reported that the delegation of decision-making to the school level was a major concern to administrators in Great Britain, Australia, and New Zealand:

> School organization concerns mostly related to the central question: how much autonomy can be granted to individual schools in matters such as staffing, curriculum, budget and allocation of resources, and policies concerning students.

There is evidence of increasing interest in decentralization in Canada, although no national survey has been made. Several large urban systems such as Calgary Public and the Toronto Board of Education have established area units of administration. There also has been increasing interest in Canada in the delegation of decision-making to the school level. The Toronto Board of Education adopted the major recommendations of a report (Jaffary, 1975) which called for increased decentralization to the school level for functions such as budgeting and curriculum, with provisions for the formation of school councils. A recent study of school staffing practices in Alberta (Ratsoy, et al., 1976:261) noted that:

> The presence of many alternative staffing practices is associated with increased school autonomy in budgeting, staffing, curriculum development and instructional methodology.

The Edmonton Public School Board (Parry, 1976) recently established a pilot project in decentralized school budgeting which permitted seven schools to budget for staffing, services, equipment, and supplies, subject only to the constraints of board and provincial curriculum guidelines and the terms of collective agreements.

NEED FOR THE STUDY

Much of the literature dealing with the trends summarized above is concerned primarily with descriptions of the various practices. Powell (1975) and Ornstein, et al. (1975), for example, provided reviews of practice across the United States, while Thayer and Beaubier (1973) reported developments in California. Several reports and studies have focused on the adoption process. South (1976) and McNutt (1975), for example, examined the development of school-based management in Monroe County, Florida.

The benefits which are claimed for decentralization are numerous and, in some cases, extravagant. Furniss (1974:949), writing generally, noted that:

> All major shades of opinion seem to ascribe to decentralization great powers of social and/or moral regeneration. The counterpoint, "centralization," is associated with most of the evils of the modern polity: delay, red tape, constraints on individual initiative, restraint of spontaneity.

Research to date, however, has yielded mixed findings. Ornstein (1973:16) reported that "as of now, we have no research evidence that decentralization and community control improve education." On the other hand, Moore (1975:9) wrote positively of more localized attempts at decentralization, especially those which increased the decision-making authority at the school level:

> The evidence regarding the success of more localized decision-making seems to far outweigh any reports of its failures. Indeed, it is difficult to disagree with the desirability of supporting more moves in this direction.

Several of the studies in decentralization used aggregate data from many systems. La Noue and Smith (1973:33) suggested that detailed, case study investigations may reveal more meaningful results.

There is a dearth of literature concerned with the decentralization of budgeting. While various forms of the practice were described in several of the sources cited above, only one study was located (Seward,1975) which focused on the outcomes of the practice. No reports or studies of recent trends in Canada were found. The need for study in this area is apparent if one considers the importance of the budget. Dye (1975:217), writing in the context of policy-making, observed that:

> The budget is the single most important policy statement of any government . . . . Budgets determine what programs and policies are to be increased, decreased, lapsed, initiated, or renewed. The budget lies at the heart of the policy process.

Lindblom (1968:8) saw this role for the budget as a recent phenomenon in that "budgeting has outlived its days as an unexciting administrative tool; it has blossomed into a high-level process for systematically appraising policy choices themselves."

This study thus responded to a need for a broad exploratory investigation of recent trends in decentralized school budgeting. Such a study was seen to require an examination, not only of the nature of the practice, but also of the objectives, processes of adoption, problems, and perceived outcomes. This was considered a special need in Canada where, unlike the United States, no descriptions of the practice exist.

The province of Alberta was considered an appropriate setting for the study in view of the developments in decentralized school budgeting which had been reported (Ratsoy et al.,1976; Parry,1976), and because of the lack of recent research. The most recent studies of school budgeting in Alberta were conducted prior to these developments. Finnman's (1970) study of budget procedures in school divisions in Alberta found participation by principals and teachers in budget preparation to be "very little" or "none," the only exception being "some" participation by principals in the areas of preparation of estimates for instructional aids and in general educational planning. The study by Simpkins (1968) found that teachers in Edmonton preferred increased school-based decisions in a number of areas, including budgeting. Blacker's (1971) study found support among teachers and principals in Edmonton elementary schools for increased decentralization of budget decisions.

PURPOSE OF THE STUDY

The purpose of the study was to investigate the nature, objectives, adoption, operation, and perceived outcomes of decentralized school budgeting in Alberta.

Statement of the Problem

The problem for research is stated in twelve parts as follows:

1. How do school systems vary in the extent to which budget decisions have been decentralized to the school level?

2. How does the political-legal framework in Alberta constrain the implementation of decentralized school budgeting?

3. What forces have influenced the introduction and development of decentralized school budgeting?

4. What are the objectives of decentralized school budgeting?

5. What change strategies have been adopted by school systems to implement decentralized school budgeting?

6. What problems have been encountered by school systems in implementing decentralized school budgeting?

7. What procedures are followed to prepare and administer school budgets in school systems which have implemented decentralized school budgeting?

8. What operational problems have been encountered in school systems which have implemented decentralized school budgeting?

9. How do central office administrators and principals perceive the effects of decentralized school budgeting on the frequency and severity of disagreements related to school budgeting?

10. What differences occur between the perceptions of central office administrators and principals in respect to the extent to which the objectives of decentralized school budgeting have been attained?

11. What changes to current decentralized school budgeting practice are preferred by central office administrators and principals?

12. What differences occur between central office administrators and principals in respect to the extent of their satisfaction with current decentralized school budgeting practice?

The various sub-problems associated with the above are set out in Chapter 4.

Definitions

The following definitions were adopted for the study:

Decentralization. Decentralization is the systematic and consistent delegation of authority from central office to the school.

School budget. A school budget is a fiscal plan for implementing school objectives, policies, and programs for a fiscal year, embodying (1) descriptions of school activities and services required to attain goals; (2) estimates of expenditures and other allocations; and (3) forecasts of fiscal resources available to support the plan.

Decentralized school budgeting. Decentralized school budgeting is the systematic and consistent delegation from central office to the school of authority to make budget decisions.

Centralized school budgeting. Centralized school budgeting is the systematic and consistent retention by central office of authority to make decisions concerning school budgets.

Budget categories. Budget categories are the budget account classifications typically used or required in school system account documents.

Central office allocations. Central office allocations are the resources provided each school in the school system budget.

School systems. School systems are the school districts, school divisions, and counties in the province of Alberta.

Central office administrators. Central office administrators are professional educators who are influential in school budgeting and employed at the central office or at area offices of a school system.

SIGNIFICANCE OF THE STUDY

The current attention given to decentralization on an international level together with the paucity of research on the objectives, adoption and perceived outcomes of decentralized school budgeting, especially in Canada, suggested the need for the study. Apart from meeting this need, the study may be seen as making a contribution to the development of theory and to the administration of education.

Contribution to theory. Kerlinger (1973:9) defined a theory as:

> . . . a set of interrelated constructs (concepts), definitions, and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting the phenomena.

Early theorizing in respect to centralization and decentralization tended to be universalistic. Hage (1965:300), for example, suggested as tenable the propositions that "the higher the centralization, the higher the production," "the higher the centralization, the higher the efficiency," "the higher the centralization, the lower the job satisfaction," and "the higher the centralization, the lower the adaptiveness." Recent research, however, has stressed the contingent nature of outcomes for centralization and decentralization. Carlisle (1974:15), for example, listed thirteen organizational and individual variables which may affect the outcomes of these processes. It is therefore suggested that this study makes a contribution to the literature on decentralization since it is concerned with the identification of: (1) the conditions under which decentralization of decisions concerning the allocation of resources occurred, and (2) the perceived outcomes of the practice. In focusing on the adoption process, the study adds to the literature on organizational change. The broad, exploratory nature of the study also afforded the opportunity to identify areas for further research.

Administration of education. There have been high expectations for the contributions decentralization might make in the field of educational administration. Powell (1975:1) summarized the expectations in one area:

> A review of educational literature indicates that one ray of hope for helping central office administrators cope with the increasingly complicated problems of running efficient school systems lies in their enlisting the assistance of building-level administrators in the decision-making process.

Guthrie *et al*. (1971) saw decentralized school budgeting as an important requirement for achieving equality of opportunity, and argued that financial arrangements for state support should be based on the individual school as a budget unit rather than the school district. This study of recent trends in the key area of budgeting provides information which will assist administrators in assessing whether the optimism reported by Powell or the advantages claimed by Guthrie *et al*. are justified.

The focus on the change process itself and on the problems which have been encountered by school systems which have implemented decentralized school budgeting adds to the significance of the study for administrators contemplating a form of school-based management. South (1976) illustrated the complexity of the changes in describing the five-year plan for adoption in Monroe County, Florida. McNutt (1975), in a study of the same system, noted the problems of implementation, which included the reluctance of principals to delegate and of teachers to accept further responsibility along with difficulties experienced in communication. A study of decentralized school budgeting in Alberta explores the same areas in a different environment.

The need for the study and its significance in respect to the administration of education in Alberta was recognized by the Alberta School Trustees' Association. The ASTA provided a grant to help meet the costs of the investigation and plans to publish the findings in a monograph.

OUTLINE OF THE STUDY

This chapter briefly summarized trends in the decentralization of decision-making in education and established the need for a study of the nature, objectives, adoption, operation and perceived outcomes of decentralized school budgeting. The contribution of such a study to the development of theory and to the administration of education was noted. The problem for research was stated and the key terms defined.

Chapter 2 establishes a conceptualization of each of the three broad concepts which provide the framework for the study; namely, decentralization, organizational change, and budgeting. A theoretical background is then developed for the review of literature in Chapter 3 and the conceptual framework in Chapter 4.

Chapter 3 provides a more detailed account of trends in decentralization within local school jurisdictions. The review of literature considers reports and studies dealing with the factors contributing to decentralization; together with an analysis of the objectives, adoption processes, problems and outcomes of the various practices. The limited material on decentralized school budgeting is discussed.

The conceptual framework, research design, and methodology are set out in Chapter 4 along with a statement of the delimitations, assumptions, and limitations of the study.

Chapter 5 contains the findings of the first stage of the study which involved a questionnaire survey of all school systems in Alberta to determine the nature and extent of decentralized school budgeting.

Chapters 6 to 12 contain case studies of seven school systems which were found in the first stage to have a relatively high degree of decentralized school budgeting. Each focuses on the nature, objectives, adoption, operation, and perceived outcomes of the practice.

In Chapter 13, the findings of the study are discussed in relation to the practices reported in the review of literature and the theoretical background of the study.

A summary of the study is contained in Chapter 14 along with a statement of implications and suggestions for further research.

Chapter 2

THEORETICAL BACKGROUND

The framework for this study was derived from three broad concepts; namely, decentralization, organizational change, and budgeting. This chapter provides a conceptualization of each to serve as a theoretical background for the review of literature in education in Chapter 3 and the conceptual framework for the study outlined in Chapter 4. Each section of this chapter also contains a brief summary of the major problems associated with decentralization, organizational change, and budgeting.

DECENTRALIZATION

Conceptualization

Most writers have prefaced their remarks concerning decentralization with the caution that the term has different meanings for different people in different contexts. Furniss (1974:973), for example, identified eight different uses of the word.

Fesler (1968), frequently cited as an authority on centralization and decentralization in public administration, noted the different terminology employed from one country to another. In the United States, for example, "decentralization" is considered a generic term with adjectives such as "administrative" and "political" serving to specify narrower usage. Altshuler (1970:64) provided a concise distinction in the following terms:

> The former involves delegation from superior to subordinate officials within a bureaucracy. The organizing principle of the bureaucracy remains hierarchical. The top officials remain free to revoke the delegation at any time . . . . Political decentralization, by contrast, involves the transfer of authority to officials whose dependence is upon the subjurisdictional electorate, or more narrowly, a subjurisdictional clientele. The assumption must be that such officials will not be manipulable by the former possessors of the transferred authority.

The distinction between administrative and political decentralization has gained wide acceptance in the United States, while Schmandt (1972), and Porter and Olsen (1976) used it in their analyses of decentralization in government, and Altshuler (1970), La Noue and Smith (1973), Fantini and Gittell (1973), Zimet (1973), and Morphet, Johns and Reller (1974) employing it in their studies in education.

Chapman (1973), drawing on an earlier contribution by Walker (1972) used a similar distinction between the administrative and political "dimensions" of decentralization to describe trends in Canada and Australia. Fesler (1968:370) noted the French usage of *décentralisation* and *déconcentration*, corresponding generally to political and administrative decentralization respectively. Fesler (1968:370) also described the use by the English of the term "devolution," corresponding to *décentralisation*, or political decentralization, though it occasionally embraces administrative decentralization.

One problem which arises in this conceptualization is that the terms "administrative decentralization" and "political decentralization" are not conceptually distinct. Each involves politics in the Lasswell (cited by Dahl, 1970:5) sense; namely, a sharing of power. Hart (1972: 605) suggested the reason for the problem by noting that public administration, for which the above conceptualization is formulated, draws on both political science and administrative theory for its conceptual base. The use of the terms is so widespread, however, that this acknowledgement of the conceptual problem is provided to complete the analysis rather than to suggest that the distinction is inappropriate.

The conceptualization of decentralization in public administration reviewed above is consistent with that developed in organizational theory. Luthans (1973:136-137) reviewed the different uses of the term and concluded that:

> . . . the terms centralization and decentralization refer to the retention or delegation of decision-making prerogatives or command. From an organization theory standpoint, this . . . is the most relevant use of centralization and decentralization.

Centralization-Decentralization Continuum

Most writers, regardless of their perspective, emphasize that centralization and decentralization are best considered as opposites on a continuum whose poles cannot be attained in reality. Fesler (1968:371) suggested, as a consequence, that it is inappropriate to describe a system or organization as "centralized" or "decentralized." The use of relative terms such as "more" and "less" is required for comparative purposes.

Moran (1971:208) suggested a criterion which permits the comparison of organizations in the sense suggested by Fesler:

> One organization is more decentralized than another organization to the extent that similar decisions, of approximately equal importance in each organization, are made at a lower level in the first organization than in the second.

This criterion was employed in the study in a manner outlined in Chapter 4.

A Contingency Approach

Early theorizing in decentralization tended to be universalistic. For example, Hage (1965:30) proposed, as part of his Axiomatic Theory of Organizations, that the higher the centralization, the higher the production and efficiency and the lower the job satisfaction and adaptiveness. He provided no conditions under which these outcomes might be attained.

There is increasing interest in the development of a "contingency" or "situational" view of organizations, defined by Dessler (1976:2) as one "in which the appropriate organizational structure, leadership, staffing, planning, and control are contingent upon the nature of the organizational environment and task." Carlisle (1974:12) suggested that the development of a contingency approach for a particular concept involves listing: (1) the trade-offs associated with the concept, and (2) the situational factors or conditions that would dictate the desirability or otherwise of applying the concept.

Carlisle (1974:13-14) proposed a list of trade-offs for centralization and decentralization. Centralization, he asserted, has the advantages of: (1) achieving conformity and coordination, (2) better decisions made by more expert people at the top of the organization, (3) ensuring a better balance, (4) avoiding duplication, (5) effective deployment of resources in areas of need, and (6) consistency with the requirements for strong leadership. On the other hand, decentralization has the advantages of: (1) freeing top officials to work on policy, (2) motivational effects on subordinates, (3) higher productivity, (4) fostering development of managerial skills among subordinates,

(5) quicker decisions, (6) decisions which are responsive to local conditions, and (7) the facilitation of improved controls and performance measures. A number of theoretical propositions, models, and major research findings identify the situational factors under which decentralization occurs or is considered appropriate. These are briefly reviewed below.

Environment. James Thompson (1967) formulated two propositions which identified conditions under which decentralization is appropriate and, by implication, a factor contributing to organizational effectiveness:

> Proposition 6.2C: When the range of task environment variations is large or unpredictable, the responsible organization component must achieve the necessary adaptation by monitoring the environment and planning responses, and this calls for localized units (Thompson, 1967:72).
>
> Proposition 6.4: Under conditions of complexity, when the major components of an organization are reciprocally interdependent, these components will be segmented and arranged in self-sufficient clusters, each cluster having its own domain (Thompson, 1967:76).

Thompson suggested that the organizational response is seen typically as some kind of administrative decentralization.

Lawrence and Lorsch (1967) found a positive relationship between environmental uncertainty and decentralization in industrial organizations, thus confirming earlier research by Burns and Stalker (1961). Those divisions within an organization which faced unpredictable environments were more effective with a decentralized structure.

Nature of decision. Price (1968:60) distinguished between strategic (critical) and tactical (routine) decisions in formulating the following propositions:

> Proposition 3.3: Except where there is a high degree of complexity, organizations which have a high degree of centralization with respect to tactical decisions are more likely to have a high degree of effectiveness than organizations which have a low degree of centralization with respect to tactical decisions.
>
> Proposition 3.4: Organizations which have a maximum degree of centralization with respect to strategic decisions are more likely to have a high degree of effectiveness than organizations which do not have a high degree of centralization with respect to strategic decisions.

Price defined complexity as the degree of knowledge required to produce the output.

Size. Dale (1967) and Child (1973) reported studies in industrial organizations in the United States and England, respectively, which found that decentralization was associated with large rather than small companies although some functions remained centralized in the former. Pugh, et al. (1969:98) also reported a positive relationship between size and decentralization. Dessler (1976:111), however, cited research by Woodward and Hall to indicate that a consistent relationship has not always been found.

Technology. Woodward's (1965) research found a relationship between decentralization and technology in industrial organizations in Britain. The more successful industries tended to have centralized structures when the technology involved mass production but decentralized structure was associated with success in industries whose technologies involved unit or continuous flow production.

Perrow (1970) developed a model which suggested that the effectiveness of an organization was contingent upon an appropriate matching of organizational structure and the technology of the task.

Perrow (1970:75) conceptualized technology as "the means of transforming raw materials (human, symbolic, or material) into desirable goods and services." He developed a four-cell, two-dimensional model. One dimension considered the "search behaviour" required to determine the response to a given stimulus such that a problem may be considered "analyzable" or "unanalyzable." Analyzable search procedures are associated with routine tasks and may be completed quickly using lists of instructions, manuals, computers, or clerks. Unanalyzable search procedures are associated with non-routine tasks and require more time for their solution using experience, judgment, wisdom, or intuition. The other dimension dealt with the variability of the stimuli which may have "many exceptions" or "few exceptions," corresponding, respectively, to situations where a variety of problems and tasks are encountered or when an organization is faced with familiar situations and few novelties. The matrix of these technology variables is shown in Figure 1 along with the kind of structure which Perrow (1970:78-81) suggested as the most appropriate. Organizations whose technologies place them in cell 1 are most appropriately decentralized; those in cell 2, polycentralized (some functions centralized with others decentralized); cell 3 and cell 4, centralized.

Synthesis. Carlisle (1974:15) suggested that thirteen variables can be identified from theory, research, and practice as determining the need for centralization or decentralization in a particular situation. These summarize in an operational sense the various contingencies identified in the above review:

	Few Exceptions	Many Exceptions
Unanalyzable Search	Decentralized 1	Polycentralized 2
Analyzable Search	3 Centralized	4 Centralized

Figure 1

Decentralization and Technology:
From Perrow (1970:78-81)

1. The basic purpose and goals of the organization.
2. The knowledge and experience of top managers.
3. The skill, knowledge, and attitudes of subordinates.
4. The scale or size of the organizational structure.
5. The geographical dispersion of the structure.
6. The scientific content or the technology of the tasks being performed.
7. The time frame of the decisions to be made.
8. The significance of the decisions to be made.
9. The degree to which the subordinates will accept and are motivated by the decisions to be made.
10. The status of the organization's information systems.
11. The status of the organization's planning and control systems.

12. The degree of conformity and coordination required in the tasks or operations of the organization.
13. The status of external environmental factors such as governments, labor unions, etc.

Dessler (1976:111) concluded a similar review of situational factors by suggesting that "decentralization is a good structure for handling a great deal of information." He cited the contention of Katz and Kahn (1966:233) that "decentralization . . . is the deliberate restructuring of an organization to handle [information] overload."

Problems of Decentralization

A review of research by Dessler (1976:112-115) identified two major problems of decentralization. These were associated with:

1. The implementation of a system of adequate controls. Controls are difficult and time-consuming to implement and frequently have adverse effects on employee attitudes and behaviour.

2. The reluctance of some managers to delegate and of some subordinates to accept the responsibility to make decisions.

Both problems are frequently associated with role conflict, which is discussed further in the next section of the chapter in the context of organizational change. Koontz and O'Donnell (1976:401) reviewed the problems of decentralization and concluded that "the key to effective decentralization is the proper balance between what is to be centralized and what is to be decentralized."

ORGANIZATIONAL CHANGE

Conceptualization

MacKenzie (1974:241) defined organizational change as "a change in the structures and processes of the organization." The theory of organizational change is relevant to this study since the degree of centralization is usually considered (Pugh *et al*., 1963:210, for example) a dimension of organizational *structure*, while administrative decentralization, as conceptualized in the previous section of this chapter, involves the *process* of delegation.

The adoption of a particular pattern of decentralization may also be considered an instance of organizational innovation, defined by Rowe and Boise (1974:285) as "the successful utilization of processes, programs, or products which are new to an organization and which are introduced as a result of decisions made within that organization." Except in circumstances where the change was externally mandated, this study is concerned with an organizational innovation which involves the redesign of the structures and processes of the organization.

Models of Organizational Change

The *process* of organizational change has been conceptualized as a series of stages, with differences among the various models with respect to the number and nature of those stages. In three descriptive models examined, that developed by Mann and Neff (1961) had five, while Hage and Aiken (1970) had four, and Levinson (1976), three. Two models have been derived from Lewin's (1947:34) contention that "a successful change includes . . . three aspects: *unfreezing* (if necessary) the present level, *moving* to the new level, and *freezing* group life on the new level."

Schein (1973) elaborated the model, while Lippitt, Watson, and Westley (1972) developed a five stage adaptation emphasizing the role of the "change agent." These models are summarized in Table 1 in a manner which permits comparison. The well-known formulations of Rogers (1962) and Havelock (1973), whose stages are similar to those considered here, are not included since they relate to adoption of innovations by individuals (Rogers) and the role of change agents (Havelock).

Different writers have invariably stressed that not all of the stages included in the various models will appear in a given situation, although recent research by Zand and Sorenson (1975), which examined the perceptions of 154 management scientists on successful and unsuccessful change projects, found that successful projects had a preponderance of favorable forces in each of the three phases in the Lewin model.

Forces for Change

Katz and Kahn (1975:67) considered organizational change to be a consequence of disequilibrium generated by: "(1) changed inputs from the environment including the organizational supersystem, and (2) internal system strain or imbalance." The dual nature of forces for change was also recognized by Gibson, Ivancevich, and Donnelly (1973: 345).

A systems view of change.

Several writers have viewed change as the result of the interaction between the subsystems of an organization. Baldridge and Deal (1975) integrated the influence of external and internal forces by drawing on earlier theorizing by Udy and distinguished five subsystems of an organization: goals, environment, technology,

Table 1

Models of Organizational Change

Mann and Neff	Hage and Aiken	Levinson	Lewin	Lippitt, Watson, and Westley
1. State of Organization before Change	1. Evaluation		1. Unfreezing	1. Development of a Need for Change
2. Recognition of Need for Change				2. Establishment of a Change Relationship
3. Planning Change	2. Initiation	1. Mobilization	2. Moving	3. Working toward Change
4. Taking Steps to Make Change	3. Implementation	2. Implementation		
5. Stabilizing Change	4. Routinization	3. Institutionalization	3. Freezing	4. Generalization and Stabilization of Change
				5. Achieving of a Terminal Relationship

formal structure, group and individual processes. They suggested that each subsystem may be seen as an impetus for change or as the unit that is being changed.

Bartlett and Kayser (1973:5) proposed two subsystems: (1) the personal system, and (2) the formal system consisting of technology, structure, and leadership. They considered that the need for change arises from disequilibrium between the goals of an organization and the consequences of the various interactions between these subsystems.

A political model of change. Baldridge (1971, 1974) proposed a political model for the analysis of organizational change. He saw the change process as: (1) organizational interest groups responding to multiple pressures generated from internal and external sources, (2) articulation of interests, (3) legislation translating pressures into policies, and (4) the execution of the new policy which generates, in turn, new pressures within the organization.

The primacy of external forces. Katz and Kahn (1975:71) reported that "our reading of organizational history . . . argues the primary role of external forces in major organizational change," while Scott and Mitchell (1976:324) contrasted the contemporary "externalistic" view with earlier "immanent" theories of change and asserted that "change arises from forces, causes, factors, and contingencies that lie as variables outside the system."

The lack of a generally accepted model of organization change supports MacKenzie's (1974:241) view that the study of organizational change is still in its infancy.

Strategies of Change

Owens (1974:7) noted a recent movement from an eclectic to a systems view of organizational change which has been accompanied by "a substantial outpouring of taxonomic attempts to identify and classify the various processes by which planned, deliberate change may be controlled and directed." Three classifications of the various strategies of organizational change are considered below. The key dimension in each instance is that of power, with the different strategies based on the type of power employed.

The frequently cited formulation of Chin and Benne (1969) contains three strategies:

1. An *empirical-rational* strategy based on the assumption that man is rational and will follow his rational self-interest once it is revealed. Examples of this strategy include basic research and dissemination of knowledge, personnel selection and replacement, and the use of systems analysts.

2. A *normative-reeducative* strategy based on the assumption that practices will change only as the persons involved are able to develop commitments to new practices. This involves changes in attitudes, values, and skills in addition to changes in knowledge. Examples of this strategy include improvement of the problem-solving capabilities of a system through organizational development interventions and the use of training groups.

3. A *power-coercive* strategy involving the application of power by the use of political institutions, recomposition and manipulation of power elites, and the use of nonviolent activities. The use of legitimate power or authority is considered to be a power-coercive strategy.

Greiner (1973:49-52) conceptualized the different strategies in terms of their position on a "power distribution" continuum:

1. At one extreme is a *unilateral* strategy, with an emphasis on management reaching decisions by decree, replacement or by changes in structure.

2. A middle approach is the *shared* strategy using case discussions to solve problems or by using training groups.

3. At the other extreme is a *delegated* approach which places an emphasis on subordinates reaching decisions through group decision-making and problem-solving.

Jones (1969:116-118) utilized the taxonomy of comparative organizational power systems developed by Etzioni (1961) to produce the following classification:

1. A *coercive* strategy which utilizes hierarchy, elite involvement, pressure, and stress induction as typical tactics.

2. A *normative* strategy which utilizes such tactics as participation, involvement-commitment, education and training, voluntary association, and the use of feedback, evaluation and follow-up.

3. A *utilitarian* strategy which is characterized by control over material resources and rewards using tactics such as placement, condition assistance, and goal-setting.

4. *Neutral* tactics which are not associated with any of the above strategies. These include action research, technical modifications, and communication.

Successful change strategies. Zand and Sorenson (1975:532) noted the emergence of a body of literature which identifies the factors underlying a successful change strategy. Zand and Sorenson used Lewin's (1947) model of the change process as the framework for a study in which 154 management scientists gave information related to successful and unsuccessful attempts at change. They found that successful attempts have a preponderance of favorable forces in each of the three phases in the Lewin model: unfreezing, moving, and refreezing. Zand and Sorenson (1975:542) suggested that unless attention is paid to unfreezing, later efforts to implement the change may be futile:

> Strong reservations and resentments by unit managers during unfreezing are likely to cause great difficulties during the moving phase, and if the management scientist proceeds despite these, he meets strong resistance . . . .

Similarly, the writers noted the importance of refreezing following the identification and implementation of the change. Zand and Sorenson (1975:532) acknowledged that this research related to change projects involving the intervention of management scientists but suggested that the findings were "generalizable to other change efforts."

A similar perspective is suggested by the systems view of an organization adopted by Leavitt (1973). He considered that the four key organizational variables of task, structure, people, and technology are highly interdependent in that change in one produces a change in the others. Owens (1974:14) suggested that a strategy of organizational change focusing on one variable will be "incomplete" unless "adequate provision is made to meet the need for consequent changes in the [other variables] which the dynamic relationship of the key organizational variables calls for."

Baldridge and Deal (1975:14) suggested seven characteristics of a good strategy, each of which is consistent with the view that a variety of factors must be considered in changing an organization:

1. A serious assessment of needs is necessary.

2. Proposed changes must be relevant to the history of the organization.

3. Organizational changes must take the environment into account.

4. Serious changes must affect both the organizational structure and individual attitudes.

5. Changes must be directed at manipulable factors.

Problems of Change

Resistance to change is invariably identified in the literature as the critical problem of the change process, though some writers point out that resistance may be a signal that change is contra-indicated. Lawrence (1973:397), for example, suggested that "when resistance does appear, it should not be thought as something to be overcome. Instead, it can best be thought of as a useful red flag--a signal that something is going wrong."

Filley, House, and Kerr (1976:468-470) differentiated between individuals and groups in accounting for resistance. Individuals were seen as resisting because of: (1) the perceived threat to their careers and the time, energy, and experience they have invested; (2) inadequate information concerning the reasons for or the mechanics of the change; and (3) personality factors which make some individuals prone to resistance. Groups were seen as resisting because of: (1) group norms related to output; (2) the existence of rivalries and conflicts among groups; and (3) personality factors among members of the group.

Organizational change frequently involves the assumption of new roles by members of the organization. Resistance to change may be generated as a result of role conflict, defined by Rizzo, House, and Lirtzman (1970:155) as the incompatibility or incongruency between an individual's own role expectations and the role behaviour defined for him by an organization. These writers listed four kinds of role conflict:

1. Conflict between the focal person's internal standards or values and the defined role behaviour.
2. Conflict between the time, resources, or capabilities of the focal person and the defined role behaviour.
3. Conflict between several roles for the same person which require different or incompatible behaviours, or changes in behaviour as a function of the situation.
4. Conflicting expectations and demands in the form of incompatible policies, conflicting requests, and incompatible standards of evaluation.

Role ambiguity may also be a source of resistance. Rizzo, House, and Lirtzman (1970:156) considered role ambiguity to concern: (1) uncertainty about duties, authority, time allocation, and relationships; (2) the clarity or existence of policies and guides; and (3) the ability to predict outcomes of behaviour. Bartlett and Kayser (1973:375) related role ambiguity to resistance in observing that "people--alone or in groups--do not resist change per se. What they resist is the uncertainty conjured up by a change."

BUDGETING

Conceptualization

Wildavsky (1975:5) suggested that budgets should be conceived of as "attempts to allocate financial resources through political processes to serve differing human purposes." The different writers who have reviewed the evolution of budgeting, such as Knezevich and Fowlkes (1960), Ovsiew and Castetter (1960), Schick (1972), and Knezevich (1973), have noted that the conceptualization of the term has varied according to the "human purposes" it was designed to attain.

Traditional view. Knezevich and Fowlkes (1960:17) asserted that:

> Budgets came into being when and where there existed a need for economy and efficiency in financial operations. They accompanied the growth of representative government and the financial complexity of governmental operations.

These writers noted that budgeting by governments is a recent development with the first national budget in Britain in 1822 and the United States in 1921. Municipal budgeting was first proposed in the United States in 1899. They described budget practice in local school systems prior to 1920 as "relatively undeveloped and nonstandardized" (Knezevich and Fowlkes, 1960:19).

Ovsiew, Castetter, and Koenig (1967:212) indicated that, in the early years of this century, budgets were used essentially as control devices, "designed to hold public expenditures to the lowest minimum possible, and to make certain that there would be literal accounting of the minimum appropriation." Two of three definitions of budgeting expressed in traditional terms (Knezevich and Fowlkes, 1960:17) emphasized the financial aspects of budgeting in terms of control and efficiency:

1. A plan for financial operation which includes an estimate of proposed expenditures for a given period of time and a proposed means of financing expenditures.
2. A systematic plan for the efficient utilization of manpower, material, or other resources.

3. A financial plan which serves as a pattern for and control over future operations of an institution.

Contemporary view. Irvine (1970:7) indicated that a budget enables management to more effectively plan, coordinate, control, and evaluate. The traditional view of budgeting placed emphasis on the control function. Recent trends have seen greater attention being given to the other functions in the manner suggested by Ovsiew, Castetter, and Koenig (1967:212):

> Thoughtful consideration of the concept of the budget as a schematic plan for crystallizing organizational objectives, plans, policies, program and resources will reveal its administrative potential in activities such as planning, organizing, appraising, supervising, and controlling. In short, the budget is indispensable to the cyclical activity referred to as the administrative process.

Lindblom (1968:8) saw the role of budgeting in policy-making as a recent phenomenon in that "budgeting has outlived its days as an unexciting administrative tool; it has blossomed into a high-level process for systematically appraising policy choices themselves."

The formal definition of the budget offered by Ovsiew, Castetter, and Koenig (1967:209) contained the essential characteristics of the contemporary view:

> A budget may be defined as a specific plan for implementing organizational objectives, policies, and programs for a given period of time. It embodies (1) descriptions of organizational activities and services requisite to attainment of organizational goals; (2) estimates of expenditures and their allocations; and (3) forecasts of fiscal resources available to support the plan.

Types of Budget

Knezevich (1973:135-138) identified three types of budgets which reflect the different orientations to budgeting associated with the movement from the traditional to the contemporary views described above. Table 2 summarizes the major features of traditional, performance, and program budgeting. While Knezevich considered these types to be associated with definite periods of time since 1920, he acknowledged that traditional budgeting is still widely practised and that features of program budgeting were discernible in earlier times.

Program budgeting is a central feature of Planning Programming Budgeting Systems (PPBS) which gained public attention in the sixties with their implementation in government agencies and in many school systems. Knezevich (1973) provided a detailed account of a variety of PPB systems in North America. Critiques of the practice were provided by Wildavsky (1975), Dror (1973), Levine (1975) and Kirst (1975).

The Budgetary Process

Knezevich and Fowlkes (1960:20) stated that the budgetary process or budget cycle "represents the process of evolution of a budget from its conception to its execution and also its inevitable appraisal." They suggested that the process consisted of five phases: preparation, presentation, adoption and authorization, administration or execution, and appraisal. Jordan (1969:111) reflected the contemporary view of the process in suggesting that the tasks of budgeting included the development of goals, the determination of patterns of organization to achieve the goals, the setting of priorities among goals after determining the various resources required, the adoption of the budget, the administration of the budget, and finally in this sequence, the review of the budget.

Two distinctive approaches to the preparation of the budget are described in the literature. These are the "incremental" and "zero-base"

Table 2

Major Characteristics of Three Types of Budgets
(from Knezevich, 1973:136-138)

Criterion	Traditional Budget	Performance Budget	Program Budget
1. Approximate starting date	1920	1935	1960
2. Primary mission of budget	Disciplined expenditure control	Work-cost data accumulation and expenditure control	Fiscal implications of objectives attainment data and expenditures control
3. Perceptions of the budget as fiscal instrument	Instrument for fiscal control	Instrument for cost-analysis and efficiency promotion	Instrument for planning and analysis needed for resource allocation decisions
4. Budget processes stressed	Execution and appraisal	Preparation and execution	"Pre-preparation," preparation and appraisal
5. Classification units emphasized in budget	Expenditure objects; line items	Costs organized in terms of functions or activities	Fiscal data organized in terms of programs; programmatic structures related to objectives or target groups
6. Duration of budget period	One fiscal period only (single year)	One fiscal period only (single year)	At least one and as many as five fiscal periods (multi year)
7. Disciplines contributing most to budget development	Accounting	Engineering or administration	Economics and systems analysis
8. Planning emphasis in budget development	"balanced budget"	Costs of work accomplished	Developing expenditure proposals in light of objectives
9. Budgeting output	Fiscal control	Work efficiency determination	Prudent resource allocation decisions
10. Criterion used for appraisal of budget decisions	How resources planned for various activities actually used	Frequency of use of most efficient functions or lowest cost activities	Quality of alternatives generated and frequency of selecting desirable alternative as determined by cost-effectiveness analysis

approaches to budgeting.

Incremental budgeting. There is general agreement in the literature that budgeting has traditionally been incremental in nature since, as Wildavsky (1963:13) observed, "the largest determining factor of the size and content of this year's budget is last year's budget." Knezevich (1973:137) considered the incremental approach to be consistent with the traditional and performance types of budgets.

Zero-base budgeting. A second approach is zero-base budgeting wherein no program is continued automatically on a year-to-year basis. This is an emerging process which has been adopted by a variety of industrial organizations, as well as state and local governments in the United States. It is likely to move to centre stage in that country as a result of President Carter's support for it at the federal level. The process was first adopted in government in 1973 by Carter during his term as Governor of Georgia. Phyrr (1977:2) described the essence of the approach in these terms:

> The zero-base approach requires each organization to evaluate and review all programs and activities (current as well as new) systematically; to review activities on a basis of output or performance as well as cost; to emphasize managerial decision making first, number-oriented budgets second; and to increase analysis.

Knezevich (1973:137) considered the zero-base approach to be consistent with the requirements of program budgeting although it may be used with any type of budget. Wildavsky (1976) provided a critical review of zero-base budgeting in federal and state departments in the United States.

Problems in Budgeting

Weston and Brigham (1975:102-104) identified four major problems encountered in any kind of budgeting:

1. Budget programs can become so detailed that they become meaningless, unduly expensive and cumbersome.

2. Organizational goals may be replaced by budgetary goals.

3. Organizational inefficiencies may be hidden in a sequence of budgets by a continuation of initial expenditures without proper evaluation.

4. Budgets used excessively as instruments of control may cause resentment and frustration.

Irvine (1970) provided an extensive review of research on the functional and dysfunctional aspects of budgeting. He identified a set of factors which may contribute to the attainment of the purposes of the budget but which also have dysfunctional aspects. These are summarized in Table 3 and include problems of role conflict associated with employee participation in budgeting.

SUMMARY

This chapter provided a theoretical background for the study by examining the concepts of decentralization, organizational change, and budgeting. The conceptualization of decentralization as a movement of authority away from a central source of power included the distinction between administrative decentralization (a delegation of authority within a bureaucracy) and political decentralization (a transfer of authority to a subjurisdiction). The existence of a centralization-decentralization

Table 3

Dysfunctional Aspects of Budget Systems
(from Irvine, 1970)

Factor	Dysfunctional Aspects
The term "budget"	Traditional negative association with control
Organizational arrangements of authority and responsibility	Assignment of control responsibility where there is no authority to carry out those responsibilities Loss of coordination and cooperation among departments through an over-emphasis on departmentalization
Role conflict	Differences in the way budget staff people and line personnel understand the budgeting system and each other
Motivational aspects of budgeting	Excessive use of the budget to motivate employees may result in an increase in tension, uneasiness, resentment and suspicion
Participation in budgeting	Participation is not viewed by employees as legitimate Participation is inconsistent with leadership style, type of organization, cultural setting or background of employees Lack of employee support for organizational objectives
Communication aspects of budgeting	Failure to communicate information on planned and actual results
Employee group behaviour	Emphasis on individual performance rather than the performance of the group
Mechanical considerations	Cost of budgeting system Difficulties in estimating costs Incorrect assignment of costs Budgets considered as goals rather than means to goals Lack of flexibility in budget

continuum was noted. A review of theoretical propositions, models, and major research findings found support for a contingency view of decentralization. Difficulties associated with the implementation of control systems and the reluctance of managers to delegate and subordinates to accept responsibility were identified as major problems.

Several perspectives were reviewed which established that decentralization may be considered an instance of organizational change. Five models of organizational change were summarized and compared. Forces for change were classified as either external or internal while the strategies of change were considered in terms of their position on a "power distribution" continuum. Resistance to change was identified as a critical problem in the process.

The review of budgeting focused on the evolving conceptualization of the process, which has moved from a primary emphasis on control to a broad consideration of planning, organizing, appraising, supervising, and controlling functions. The major characteristics of traditional, performance, and program budgets were described and the existence of incremental and zero-base approaches to the preparation of budgets was noted. A number of problems of budgeting were summarized.

This chapter provided a theoretical background for the review of literature in education in Chapter 3 and the conceptual framework for the study outlined in Chapter 4.

Chapter 3

A REVIEW OF RELATED LITERATURE IN EDUCATION

A brief review of trends in decentralization within local school jurisdictions was contained in Chapter 1. Chapter 3 provides a more detailed account, with reference to the development of area units of administration, the trend to school-based management, and the practice of decentralized school budgeting which appears as a key element of the latter. The review of literature also considers reports and studies dealing with the factors contributing to decentralization, together with an analysis of the objectives, adoption processes, problems, and outcomes of the various practices. Most of the literature reviewed in this chapter describes decentralization in the United States. There remains a dearth of material related to decentralization in Canada.

This review is organized in two major sections, one dealing with the general decentralization movement in education while the other focuses on decentralized school budgeting. Each section is presented against the theoretical background developed in Chapter 2.

An Historical Perspective

Much of the current literature implies that decentralization is exclusively a contemporary development. Other writers, perhaps having a better appreciation for an historical perspective, point to decentralization as part of a cyclical process. Bresnick (1974:19), for example, cited Kaufman's contention that current trends in decentralization in the United States are part of "cyclical demands for decentralization and local control and centralization and strong leadership." He traced the different stages in the process for the New York City school system and suggested that pressures for recentralization may soon appear. McCordic (1974:51) discussed the problems of centralization and large school units in Canada and recalled when schools were more responsive to the community. Now ". . . across Canada various plans are emerging for reversing the process and reclaiming the schools for the community each serves."

The review which follows is thus set in a context of time which has seen previous patterns of decentralization and centralization and which may be followed by a process of recentralization.

DECENTRALIZATION IN EDUCATION

Administrative and Political Decentralization

The distinction between administrative and political decentralization noted in Chapter 2 is invariably used in distinguishing between the various forms of decentralization found within local school jurisdictions. La Noue and Smith (1973), Fantini and Gittell (1973), Zimet (1973), and Morphet, Johns, and Reller (1974) all used administrative and political decentralization in the sense defined by Altshuler (1970:64):

> The former involves delegation from superior to subordinate officials within a bureaucracy . . . . Political decentralization, by contrast, involves the transfer of authority to officials whose dependence is upon the subjurisdictional electorate . . . .

Nature of Current Trends

The nation-wide survey conducted in the United States reported by Ornstein, et al. (1975:125) revealed that decentralization was almost exclusively the administrative type. The survey found that nineteen of twenty-three school districts with enrolments in excess of 100,000 students had either decentralized or had made plans to do so, with similar developments in thirty-one of forty-six districts having student enrolments in the 50,000-100,000 range. All but two jurisdictions had instituted administrative decentralization only. Decision-making in a variety of areas had been delegated to administrative units bearing names such as "areas," "zones," "districts," or "clusters." Delegation to the school level had taken place in many instances, especially in curriculum and budgeting. Only New York and Detroit had instituted political decentralization in the form of community control in thirty-two and eight districts respectively. The overwhelming majority of school systems started the decentralization process during or after 1967.

While no national survey has been made, it appears that administrative decentralization has occurred on a much smaller scale in Canada. Calgary Public and the Toronto Board of Education are two jurisdictions which have introduced the area unit of administration. Decentralization to the school level for curriculum and budgeting has occurred or is planned in a number of systems but the extent of the trend has not been documented. The study of staffing practices in Alberta (Ratsoy, et al., 1976) drew attention to the trend in that province. The Jaffary (1975) Report, the major recommendations of which were adopted by the Toronto Board of Education, contained proposals for extensive decentralization to the school level. While there is some evidence of increasing community participation (Stevens, 1974), no references have been found to instances of political decentralization or community control in Canada.

Some writers have taken issue with the notion that the formation of area units constitutes decentralization. Morphet, Johns, and Reller (1974:347), for example, contended that ". . . the establishment of divisional or field offices to represent or act for the central administration is not considered decentralization." Luthans (1973:137) suggested the use of "dispersion" to describe such operations. Others, such as Breau (1969), use "deconcentration," although Fesler (1968) argued that the latter, derived from the same word in the French language, may be the most appropriate term for administrative decentralization as defined by Altshuler (1970). Each of the distinctions has merit but, for purposes of analysis, the administrative unit within a school district is considered in this dissertation to be a form of administrative decentralization because this is the sense in which it is used in the current literature.

School-based Management

A broad delegation of authority to the school level has been an important aspect of recent trends in administrative decentralization. South (1976:183) used the term "school-based management" to describe the system implemented in Monroe County, Florida. The San Francisco Public Schools' Commission (1976) adopted "school site management" as the form of decentralization it recommended to the San Francisco Unified School District.

School-based management calls for a major shift in the locus of certain elements of decision-making from the central office to the school. These elements are typically staffing, curriculum, and budgeting. The setting of district-wide performance standards, discipline policies, personnel practices and collective bargaining, and capital budgeting programs usually remain centralized.

One report of the practice (Thayer and Beaubier, 1973) arose from experience in a group of California school districts located outside the major urban areas where the superintendents developed a variety of working models of decentralized decision-making. Details of those models are contained in the report. Other practices were reported by Herman (1976) in West Bloomfield School District, Michigan; Gordon and Iverson (1976) in Lansing School District, Michigan; Burroughs (1973) in elementary schools in four California districts; Stone (1973) in high schools in the four California districts studied by Burroughs; and King (1966) in a study of relatively early trends in Montgomery County, Maryland, and Atlanta, Georgia.

A survey by the Educational Research Service (Powell,1975:1) indicated the extent of the practice in the United States:

> . . . ERS asked 1,269 school systems stratified by enrollment size to indicate whether they had policies that encouraged decentralized decision-making on the part of principals. Of the total 554 respondents, 42.6 per cent indicated that such policies were in existence in their school systems; an additional 15.2 per cent indicated that such policies were currently being developed.

The extent to which the characteristics of school-based management can be found in school systems in Canada has not been determined. The study of staffing practices in Alberta school systems (Ratsoy et al., 1976:261) reported increased school autonomy in budgeting, staffing, curriculum development and instructional methodology. The Toronto Board of Education has accepted the Jaffary (1975) recommendation for wide-ranging decentralization to the school level for decisions related to curriculum, budget, and personnel.

Factors Contributing to Decentralization

The identification of forces giving rise to a felt need for change is included in most models for the analysis of organizational change. These models were reviewed in Chapter 2.

The review of literature found that the factors contributing to or promoting decentralization in education were generally of four kinds, working singly or in combination, representing demands for (1) increased sensitivity to local needs and problems, (2) reversal of the effects of size and centralization, (3) accountability, and (4) professionalism and the desire for participative management.

1. Increased sensitivity to local needs and problems.

In the United States, decentralization has been the response to problems of race, poverty, and low pupil achievement in what has become known (La Noue and Smith, 1973:13) as "The Crisis in Urban Education."

O'Shea (1974) analyzed trends in political and administrative decentralization and derived two models to which school systems conformed in varying degrees. Political decentralization, or community control, conformed to the political model proposed by Easton (1965). In New York and Detroit, and to a lesser extent Los Angeles, the following sequence (O'Shea, 1974:3) was followed:

1. Rapid expansion in the proportion of minority group residents in urban populations.

2. Parallel increases in the proportion of schools with relatively low average levels of achievement.
3. Demands for desegregation as an approach to improving student achievement.
4. Relatively little response to desegregation demands.
5. Change from call for desegregation to demands for community control and direct accountability of schools to their clients.
6. Involvement of partisan political leaders in the educational problem.
7. Informal alliances between minority leaders on the one hand and influential white liberals or conservatives on the other.
8. Adoption of decentralization plan.

O'Shea (1974:6) saw administrative decentralization following an organizational model similar to that suggested by Thompson's (1967:76) proposition for complex organizations confronted by uncertain and dynamic environments:

> Under conditions of complexity, when the major components of an organization are reciprocally interdependent, these components will be segmented and arranged in self-sufficient clusters, each cluster having its own domain.

Thompson predicted the appearance of "boundary spanning" activities in the same circumstances. The Thompson proposition was included in the review of theory in Chapter 2.

O'Shea traced developments in Los Angeles showing the increasing uncertainty and complexity as demands by blacks escalated in the mid-sixties. The result was the formation of administrative zones ("self-sufficient clusters") and increased community participation ("boundary spanning") in the manner suggested by Thompson.

The factors which gave rise to the events in the United States have not been present to any significant extent in Canada, although the problems faced by the Toronto Board of Education (Green, 1975) bear similarity to those in several urban areas of the United States. The Toronto problem is exemplified by the fact that the Board must print all publications in five languages. Green (1975:7) described the sequence of events which led to community involvement in school building design and curriculum planning among the Portuguese speaking groups. Low pupil achievement and insensitivity to local minority group needs and interests were perceived to be causal factors.

Elsewhere in Canada, community participation seems to be developing as an article of faith that local needs will be met more effectively. Few sources were located which identified specific problems leading to decentralization. Sharing of school facilities occurs frequently but the Select Committee on the Utilization of Educational Resources in Ontario (Ontario, Ministry of Education, 1975) went beyond this to propose that the Minister should:

> . . . allow, encourage and support the development of alternative frameworks for decision-making that provide for local community participation and involvement in . . . the design, organization, and implementation of the school curriculum.

2. Reversal of the effects of size and centralization. Trends in decentralization in both Canada and the United States have also been initiated in response to problems associated with size and centralization. The Educational Research Service survey reported by Powell (1975:1) found that forty percent of school systems with enrolments in excess of 3,000 had policies which encouraged decentralized decision-making by principals compared to twenty-five percent of schools with fewer than 3,000 students. King (1966) found that the moves to decentralization

by the Montgomery County (Maryland) and Atlanta Public (Georgia) school systems were made primarily because of their size and continued rapid growth. A later study by Faison (1975) in Philadelphia, Pittsburgh, and the District of Columbia, in addition to the two systems studied by King, confirmed that decentralization had occurred in response to problems related to size as well as to demands for greater citizen participation in governance.

In Canada, it is the larger school systems which have felt the need to decentralize by establishing area units of administration. McCordic (1969:109) stated that "the very large metropolitan areas face one overriding problem that constantly threatens to destroy the effectiveness of their educational systems: bigness itself." The Interim Report of the Committee on the Utilization of Educational Resources in Ontario (Ontario, Ministry of Education, 1973:2), which provided the basis for subsequent recommendations for community participation, concluded that "we have found that most government agencies have become so large and centralized that they seem to be isolated, unresponsive, and even inaccessible to those needing their services."

3. Accountability. Many writers see decentralization of decision-making as a prerequisite for achieving accountability. Greenfield (1972:22) suggested that a school system is accountable "when it defines clear objectives and makes known how effective it has been in achieving them." Greenfield was supported by Taylor (1973) when he made clear that, if a program of accountability is to work, there must be an increase in the autonomy and responsibility principals and teachers feel for the conduct of the affairs in their schools. They

must be involved in defining objectives and programs. Greenfield, et al. (1969) included budgeting in this prescription.

The association between accountability and decentralization has also been made in the United States. Zimet (1973:120) asserted that "the notion of accountability lies at the very heart of decentralization." Similar statements were made by Zenke (1975).

4. Professionalism and the desire for participative management. Neal (1964) and Miklos (1970, 1974) described the increasing professionalism and expertise among educators as forces promoting the decentralization of decision-making in schools. Both Neal and Hewitson (1975), however, were careful to point out that not all teachers required or desired the same degree of participation or autonomy.

The trend to school-based management has not always been a response to community interest groups or increasing size. Seward (1975:8) reviewed the development of the practice in the consortium of school systems outside the major urban areas in California, and noted:

> Typically the pressure for decentralization in these districts has come from superintendents primarily interested in participative management, and not from the communities which, unlike their urban neighbours, have been generally trusting and supportive of the leadership in this area. Often community participation is seen as the next step and ultimate goal after principals and school staffs have accepted and practised their new role . . . .

Discussion. The factors contributing to change set out above are consistent with the predictions of the theory included in Chapter 2. The four factors can be classified as external forces or internal forces, or as a combination of both. O'Shea (1974) classified the demand for greater sensitivity to local needs and problems as a factor in the environment consistent with the Thompson (1967) proposition. Hall (1972) would consider this factor as originating from the specific environment of the jurisdictions concerned. On the other hand, the demand for accountability may be considered a general environmental condition since it was experienced by most public organizations in the last decade.

The demand for the reversal of the effects of size and centralization and that arising from professionalism among educators can be considered as combinations of internal and external forces, but primarily the former. Taken together, all factors generate the kind of response predicted by the Perrow (1970) model. The diversity in school jurisdictions ("many exceptions") combined with the difficulties associated with the identification of solutions to problems (difficulties in "search behaviour") calls for some measure of decentralization.

Goals and Expectations of Decentralization

The goal statements found in the literature generally reflect the factors which have promoted the trend. Ornstein, et al. (1975:117-119) reviewed literature relating to political decentralization and found that the practice was intended to:

1. Make teachers and administrators accountable.
2. Lead to educational innovation.
3. Lead to parent and public participation.
4. Enable local boards to hire principals and staff suited to local needs.
5. Raise student achievement.
6. Promote self-government for blacks and other minorities.
7. Lead to educational reform.

Ornstein, et al. (1975:129) surveyed sixty-nine school districts in the United States which had instituted administrative decentralization and found that the major purposes were perceived as being to:

1. Reduce the administrative span of control.
2. Provide greater staff sensitivity to local problems and populations.
3. Enhance school-community relations.
4. Provide greater articulation and continuity in the K-12 program.
5. Provide more efficient maintenance and supply support of the school unit.
6. Reduce bureaucratic overlap and waste.

No similar nationwide surveys have been done in Canada.

In general, few goal statements or objectives for decentralization were located in the literature. A "statement of expectations" more appropriately describes the material, with the fundamental assumption being that better decisions will be made by persons closest to where those decisions are to be effected. Coons, Clune, and Sugarman (1970:14) used the term "subsidiarity" to describe the principle that "government should ordinarily leave decision-making and administration to the smallest unit of society capable of handling it." Cunningham (1968:104) advocated the subsidiarity principle when he established criteria for building or appraising metropolitan structures in education. A key program value, he wrote "is the lodging of program decision-making as near as possible to the affected constituency."

Change Strategies in Decentralization

Several studies have focused on the adoption process and the various change strategies which have been employed. One of the most widely reported has been the adoption of a school-based management system in Monroe County, Florida, a school district which encompasses all of the Florida Keys south of Dade County and consists of a series of small islands connected by bridges and causeways. School centres are clustered in three areas approximately fifty miles apart. The student enrolment in 1976 was around 10,000. The change, which was initiated by the superintendent, principals and teachers, and approved by the Board, was designed (South, 1976) to: (1) involve parents and community members in goal setting, (2) involve school personnel in establishing objectives for each school centre, (3) decentralize school budgeting using lump-sum allocations based on number of students and need, and (4) replace the line-staff principle and decision-making based on position and status with the team principle and collegial decision-making. South (1976:183) indicated the extent of the changes involved by noting that it entailed:

> . . . a complete change in organization structure, organization relationships, organization values, reward systems, and major organization processes, such as planning, budgeting, and resource allocation.

The change was effected in a five-year program from 1971 to 1976. Both South (1976) and Deane (1975) provided detailed accounts of the process, with South using an adaptation of the Lewin (1947) model of organizational change in his analysis. This model was reviewed in Chapter 2. The stages of the Monroe County change were:

1971-72: Preparation for system change. The major theme was the destabilization of existing goals and changing expectations about the future. Training sessions in group problem-solving and shared decision-making were conducted for principals who were involved increasingly in district-level decision-making.

1972-73: Unfreezing. Principals were identified as the key to the change effort as experiments were conducted with different intergroup work arrangements and plans were laid for reeducation of superintendents, central office staff, principals and teachers.

1973-74: Beginning transformation. Workshops were conducted for central office and school personnel. Both groups began decision-making using a team approach.

1974-75: Redefining the system. Relationships between schools and central office were clarified, roles established and policy issues relating to future change and uncertainty defined. Expenditure records for each school over a five-year period were compiled.

1975-76: Institutionalizing learning and adaptation processes. Full implementation of school-based management was accomplished with the inclusion of zero-base budgeting.

South (1976:189), who was involved in a variety of consultant roles over the five-year period, found little guidance in the literature, especially in providing answers to what, for him, was the key issue--"how to design a process by which a system redesigns itself and in the process diffuses a new system." The innovative nature of the Monroe County experience was recognized (Powell, 1975:6) by the commitment of state funds to the project and the involvement of four Florida universities.

Cawelti and Howell (1971) described the in-service activities organized in the Tulsa (Oklahoma) school district to decentralize decision-making. A three-phased Administrative Development Program over a one year period involved principals in a series of bimonthly meetings in large and small groups. Information packages, the assistance of consultants, travel and independent study were also utilized.

Several recent decentralizations have followed major studies. The San Francisco Unified School District reorganization, for example, followed the recommendations of the San Francisco Public Schools' Commission (1976) which met over a twelve-month period in 1975-76. The recommendations for implementation included provision for in-service training for principals to increase their skills in planning and management.

The literature reviewed generally indicated a change process requiring a number of years for implementation. Some aspects of the recommendations made to the Toronto Board of Education (Jaffary, 1975: 57), for example, involved a seven to ten year period. The four-year decentralization undertaken by the Los Angeles City Board of Education began in 1971 following a series of recommendations by a special task force. Subsequent task forces evaluated the changes in 1972 and 1973 to identify where further adjustments were required (Los Angeles City Board of Education, 1973).

Problems of Implementation and Operation

Several studies have identified problems in the implementation and operation of school system decentralization. McNutt (1975) evaluated the effect of delegation on selected school system personnel during the implementation of the Monroe County school-based management system described above. He found: (1) reluctance on the part of principals to delegate, and of teachers to accept, further responsibility and (2) problems in communication. South (1976:191) indicated his awareness of the communication problem when he recalled that he was unable to obtain funds for a new communication system involving high-speed information processing:

> My interest in this stemmed from the belief that the regular communication channels and services could not support adequately the increased volume and range of communication, nor a network type of operation.

Faison (1975) found that Pittsburgh abandoned decentralization because of the lack of sufficient advance planning, adequate resources, and its ability to cope with the problems facing the district.

Brick (1971) developed a model for school district decentralization and field tested it over a two-year period in a system with 11,000 pupils. He found a high level of anxiety developed among the participants due to a perceived loss of control by administrators and increased demands made upon teachers.

A different perspective of problems was provided in a recent evaluation of the Alum Rock voucher project in California. An important aspect of the project (Levinson, 1976:25) was that:

> The central office staff was to change its role from one of line authority to one of support for the principal who was to have complete autonomy at his school in the areas of personnel, curriculum, budget and community relations.

Levinson (1976:3) conceptualized the change process in three sequential stages: mobilization, implementation, and institutionalization. This model was included in the Chapter 2 review. He found evidence during the implementation phase of factionalism and suspicion among the key groups, with principals seeking to test the limits of their new autonomy and central office staff becoming accustomed to a support role. Three years later, during the institutionalization phase, these tensions were reduced as the groups understood the constraints of the system. At this point, a process of recentralization took place as the school system, facing a precarious budget situation, established stringent controls. At the same time, Levinson (1976:20) noted, there was dissatisfaction among teachers and principals:

> They did not like taking on added responsibilities such as budgeting and working with parent advisory groups. They did not like feeling competitive in their own school and with other schools.

The problems described above are generally consistent with those suggested in the review of theory in Chapter 2. These centre around role conflict and resistance to change, in addition to technical shortcomings in the planning and implementation phases.

Outcomes

A number of studies examined the outcomes of decentralization in education. These may be classified according to the key dependent variables. Those reviewed below are concerned with: (1) satisfaction, (2) adaptability, (3) productivity, (4) goal achievement, and (5) conflict.

1. Satisfaction. Belasco and Alutto (1972) examined the relationship between levels of satisfaction and the extent of participation in decision-making for teachers employed in two school districts in New York State. Teachers indicated actual and preferred extent of participation in twelve decision areas with groups established for analytic

purposes according to decisional deprivation, decisional equilibrium, or decisional saturation (respectively less, same, and more participation than preferred). The study found that teachers who were decisionally deprived reported significantly lower satisfaction levels than others. Of special significance was the finding that teachers with the highest mobility-propensity (used as an indicator of low satisfaction) perceived the influence/authority structure as being more centralized in the superintendent's office than those with low mobility-propensity.

The study by Belasco and Alutto, along with others summarized by Hewitson (1975), suggested that not all educators desire or seek the same degree of participation in decision-making. These findings gave support to Neal (1964:31) who observed that not all are prepared to accept the responsibilities which complete decentralization might bring.

2. Adaptability. Early research by Cillié (1940) found that decentralized schools in New York achieved greater capacity for change and flexibility in the area of curriculum and instructional methods than centralized schools. Cawelti (1975) reported a survey of fifty of the largest school districts in the United States and found that the establishment of area units of administration had little impact on the initiation of new programs. Staples' (1975) report contained papers with mixed findings.

Little information appears to exist in Canada on the effect of decentralization on adaptability and flexibility. Coleman (1972a), however, raised questions concerning the stifling of instructional flexibility through overcentralization and advocates further research in a variety of school systems. Erickson, et al. (1970) studied instructional flexibility in Vancouver School District and found that innovative schools tend to have principals with a more participative style of leadership than those in the less innovative schools. The researchers also suggested (Robinson and Erickson, 1971:11) that the innovative process will be enhanced by increased decentralization, but they are sharply critical of the area unit of administration, advocating instead increased delegation to the school level:

> What typically seems to occur . . . is that the district [area] superintendent makes it possible for central office officials to ensure more than formerly that their directives are followed. Thus, the investigators find it hard to rationalize decentralization that does not visualize the individual school as the newly important decision-making locus.

3. Productivity. Apart from measures of student achievement, indicators of productivity in education include (Coleman, 1972b:41) measures of drop-out and absenteeism rates, and success of graduates. Several studies in the United States have examined the impact of decentralization on these variables.

Zimet (1973) conducted a study of the effectiveness of decentralization in one community school district in New York for the two-year period following the 1969 legislation which established community boards. For comparison, he selected measures of reading scores, student and teacher absenteeism, student suspensions, vandalism, teacher and principal transfers. He found no significant change in any of these indicators. La Noue and Smith (1973:231) surveyed eight large cities in the United States and concluded that "no significant evidence exists about the relationship between decentralization and student achievement." Ornstein (1973:613) summarized these rather gloomy findings by reporting that, "as of now, we have no research evidence that decentralization and community control improve education."

Moore suggested that local school planning is more successful than the general system-wide endeavours described above. Moore (1975:9) concluded:

> The evidence regarding the success of more localized decision-making seems to far outweigh any reports of its failures. Indeed, it is difficult to disagree with the desirability of supporting more moves in this direction.

Moore (1975:9-10) cited support for her conclusion from a study in Michigan on the effectiveness of a compensatory education program and another in California, on the impact of school budgeting arrangements on program effectiveness.

4. Goal achievement. No major study was located which systematically examined the extent to which the goals of decentralization have been attained. In Los Angeles, a set of goals was established similar to those identified by Ornstein et al. (1975) for administrative decentralization (cited earlier in this chapter). An "in-house" study (Los Angeles City Board of Education, 1973) was conducted two years after implementation. Educators and members of the public were asked to rate the "value" and "progress" for each of sixty-one goals on a scale "none," "little," "some," "much," or "great." The results revealed that the goals were considered to have "much" to "great" value but that progress made was only "little" to "some."

Findings for political decentralization have generally been negative. Ornstein et al. (1975:129) decried the failure of school boards to establish pilot projects and evaluative procedures. Ornstein

(1973:610) suggested the presence of "bandwagon wisdom" as boards scrambled to decentralize. Schiff (1976:378) noted that fewer than ten percent of New York voters bothered to vote in the school board elections in 1975, and concluded of political decentralization in that city:

> Decentralization was a temporary political panacea for a central board heavily weighted down with red tape, unresponsive to local requests, and under increasing political fire. It was, however, far from an educational panacea for disadvantaged children.

5. Conflict. Few studies were located which studied the relationship between decentralization in education and conflict. An important study which provided one perspective was that undertaken by Corwin in an investigation of conflict among teachers in Ohio.

Corwin (1970:262) examined a line of reasoning developed by Gamson:

> . . . the decision-making apparatus provides a channel to communicate existing grievances, and, to the extent that employees participate in decision-making, they have the opportunity to express irritations that otherwise might have remained latent . . . . Following this line of reasoning, insofar as day-to-day decisions are decentralized, the faculty will have both more reason and more opportunity to disagree among themselves.

On the basis of the above, Corwin (1970:262) tested the hypothesis: "Organizational tension and conflict are positively associated with the extent to which subordinates participate in the authority system."

Corwin found that, for routine decision-making, the extent of participation was positively related to the number of disputes but inversely related to the number of major disputes. Corwin (1970:264) suggested that:

> . . . the authority to make routine decisions offers more opportunity to express existing disagreements and provides more occasions for disputes to arise, but . . . the decision-making process could prevent minor aggravations from accumulating and developing into major incidents.

Few statistically significant correlations were found for policy decision-making. The key finding was that centralization of non-professional policy was inversely related to the rate of severe conflict.

Corwin thus found support for the notion that decentralization of routine decision-making facilitated conflict in a functional manner, while centralization tends to reduce major conflict for nonprofessional policy decisions.

Implications

The following conclusions and implications for public education at the school level emerge from the review of research in education:

1. Decentralization of decision-making to the school level tends to enhance satisfaction providing this increase in participation is desired.
2. Decentralization tends to facilitate adaptability and flexibility in curriculum and instructional methodology with decentralization to the school level apparently having more impact than reliance on area units of administration alone.
3. School districts should not have high expectations, at least in the short run, for improvement in pupil achievement and measures on other output variables. Some evidence exists, however, for the success of small localized projects.
4. There is support for the expectation that decentralization of routine decision-making will facilitate the resolution of interpersonal

and interunit conflict by reducing the number of major conflicts. On the other hand, the findings in respect to satisfaction suggest that role conflict may be generated by inappropriate demands on time, resources, and capability. In this respect, Moore (1975) stressed the importance of well-trained principals and staff, adequate support and technical services, and integrative devices which include individuals with boundary-spanning roles.

DECENTRALIZED SCHOOL BUDGETING

Significance

Decentralized school budgeting is a major component of the trends in administrative decentralization described in the first part of this chapter. Thayer and Beaubier (1973:33) expressed the importance of budgeting in school-based management:

> To decentralize decision-making down to a lower level without giving personnel expected to make decisions greater control over allocation of resources is both contradictory and self-defeating.

Two recent reports recommended a central role for decentralized budgeting in proposals for school-based management. The San Francisco Public Schools' Commission (1976:5) indicated that an essential objective of the site management concept was:

> . . . to recognize the pivotal role of the principal in the education process, and to reinforce his or her responsibility with the resources and authority to plan and implement the school program, including the allocation of resources at the school site . . . .

Similarly, the budget recommendations to the Toronto Board of Education (Jaffary, 1975:138) included a proposal for school principals to budget a lump-sum allocation across a relatively large number of budget categories.

The central role of budgeting in administrative decentralization suggests that the factors underlying the adoption of the practice, the associated goals and expectations, change strategies in the adoption process, problems, and outcomes may be encompassed by the general review contained in the first part of this chapter. The summary which follows provides a brief description of the different forms of decentralized budgeting and a review of the limited literature on the subject.

Patterns of Decentralized School Budgeting

Garvue (1969:112) identified five types of budgets developed by sophisticated school systems:

> (1) a current budget (pertains to operations in a fiscal year); (2) a long-term budget (a plan comprising a community's educational aspirations for a future period of five to ten years); (3) a capital budget (capital outlay plans for several years); (4) a building budget (resources and expenditures of a building project); and (5) a special project budget (projects omitted or separated from current expenditures).

Decentralization of budget decisions has occurred mainly for the current budget.

Decentralized school budgeting goes beyond traditional levels of participation by school personnel. Participation has been advocated as sound practice for many years, usually along the lines outlined by Burrup (1974:234):

> Sound budgeting theory dictates that teachers and other school personnel should be provided with forms and figures indicating budget allotments and expenditures for one or more past years and with blanks for estimates of next year's needs. Some districts will ask for cost estimates; others make such estimates in the district office after staff members have indicated the quantity and kind of needs.

Information concerning the various patterns of decentralized school budgeting in the United States was obtained largely from monographs by Powell (1975) and Thayer and Beaubier (1973); the doctoral study conducted in California by Seward (1975); and from policy statements and budget handbooks obtained from school systems in California during visits by the researcher in the summer of 1976. Other than that obtained from Alberta school systems in the exploratory stages of the study, no literature was located which described the extent and nature of decentralized school budgeting currently employed in Canada.

The pattern adopted by the Santa Clara Unified School District in California illustrates a high degree of decentralization using a "resource allocation" model. The following outline was provided in a budget handbook (Santa Clara Unified School District, 1975) used in the system:

1. Each school is assigned a principal and one secretary.

2. A lump-sum allocation based on student enrolment is made to each school for the budget categories of certificated salaries; classified (non-certificated) salaries: books, supplies and equipment repair-replacement; contracted services, other expenses and transportation for field trips; and capital outlay (additional equipment).

   The resource allocations vary according to grade level. In the 1975-76 budget, the per pupil allocations were $657.06 (K-3), $620.50 (4-7), $883.79 (7-8), and $878.84 (9-12). Special allowances are made for schools with unusual grade distribution and for Special Education and sports programs.

3. Schools must conform to the California Education Code in respect to maximum teacher-pupil ratios and the employment of teachers' aides.

4. Decisions are centralized for the amounts allocated for substitute teachers, classified (non-certificated) sick leave, data processing, utilities, and maintenance of school plant.

5. A standard cost list is provided for all certificated and classified personnel, supplies and equipment. Average salary costs are used for each category of personnel, thus no saving is accrued by the appointment of less experienced or less qualified teachers.

6. Thayer and Beaubier (1973:36) indicated that accountability is built into the Santa Clara model through a form of Management by Objectives. All principals are required to develop goals, objectives, a plan of action, and evaluative criteria. Monitoring and evaluation is carried out annually by central office and school administrators.

An alternative to the "resource allocation" model is the use of the "personnel unit" which Thayer and Beaubier (1973:33) described as "an administrative technique for allocating those financial resources previously used in employing classroom teachers." Each school is allocated a specific number of personnel units on the basis of student enrolment. Each personnel unit is equivalent to the average teachers' salary for the district. The amount of money equal to one personnel unit is available for other purposes should the principal choose to eliminate a teaching position.

The Escondido Union School District in California describes the personnel unit as an Educational Resource Unit (ERU). For the 1976-77 school year (Weiss, 1976), each school was allocated one ERU valued at $12,000 for each twenty-seven students. Schools were permitted to vary the teacher-pupil ratio to a maximum of 30:1. For a school of 540 students, this formula provides a maximum of $24,000 which may be devoted to other objects. The budgeting of these units is subject to the approval of the superintendent. Each school also receives supplementary certificated and classified personnel allocations in addition to a resource allocation for non-salary items determined on a per pupil basis.

Another form of the personnel unit is used by the Newport-Mesa Unified School District in California. In 1975-76 (Newport-Mesa Unified School District, 1976) one staffing unit was equal to one full-time ten-month teacher's average salary of $18,484. A conversion table indicates possible personnel exchanges based on a staffing unit value of 1.0. Sample conversion factors are 1.532 for an assistant principal at the high school level, 0.540 for a library clerk, and 0.292 for a security guard employed for four hours per day. Employee benefits must be added to these factors. Resource allocations are also made along with provisions for special programs. A form of Management by Objectives, similar to that described above for Santa Clara, has been implemented to help achieve accountability.

Reports of similar patterns of decentralized school budgeting in the United States are provided by Powell (1975) and Herman (1976).

Few reports of decentralized school budgeting in Canada were located in the literature. The pilot project in Edmonton Public in Alberta (Parry, 1976), investigation of which was a key aspect of this study, was given some attention in the media prior to the study. Seven schools were involved in a pilot which allowed a high level of school input on the staffing, services, equipment and supplies components of the budget in addition to utilities and custodial services. The study of staffing practices in Alberta (Ratsoy, et al., 1976) contained references to decentralized school budgeting practice in two systems which permitted schools to exchange the services of teachers and teachers' aides subject to certain constraints.

Factors Contributing to Decentralization of Budgeting

The factors identified in the first section of this chapter as contributing to decentralization within urban school districts may be considered applicable to decentralized school budgeting. Seward (1975:4), however, provided information which related specifically to budgeting in suburban districts in citing a survey of budget practices in 383 school districts conducted in 1973:

> An analysis of the questionnaire data and supplemental interview information . . . confirmed that the budget reform movement in California suburban districts was initiated by administrators, not by community activists, and not by legislative mandate as in New York and Florida. There are also indications that variables such as district size, wealth, tax effort, and ethnic enrollment were not associated with the degree of decentralized budgeting.

There was some evidence in the literature that the development of computer-based information systems has facilitated decentralized budgeting. Holton (1973:92) reviewed the use of the computer in installing decentralized budgeting in two school systems in Illinois and concluded:

> . . . increased reporting capability has helped to put planning and control of educational resources right at the teaching levels of activity . . . . This has promoted an increased participation in the planning and administrative process by teachers, students and parents.

In the Hall (1972) framework, the development and utilization of computer systems is an instance of the impact of technological conditions in the the general environment.

Expectations and Assumptions

The central role of decentralized budgeting within the wider policies of decentralization suggests that the goals of the former are bound inextricably with the latter. Decentralized budgeting is thus generally assumed to be a means for achieving the goals of decentralization as set out in the first section of the chapter, especially in terms of achieving increased sensitivity to local needs and problems, accountability, and participation.

Several expectations for the practice of decentralized school budgeting are couched specifically in terms of efficiency of resource allocation. James and Levin (1970:254) discussed the community school movement in the United States and reviewed the little evidence of economies of scale and substantial evidence of diseconomies of scale in urban school districts. They advocated decentralized school districts with lump-sum budget allocations to each school. Guthrie _et al_. (1971) reviewed the wastefulness of grants made from state sources to school districts in the United States. Funds have not been directed to individual school projects where the needs were greatest. They argued that the most important change required is for state support to be based upon the individual school as the budget unit.

Decentralized school budgeting is seen by some writers as contributing to the effectiveness of a system of program budgeting. Such a system may involve school personnel at all stages but especially in the planning stage in the determination of needs, goals, objectives and in the identification of required resources. One view of the Program Accounting and Budgeting System in Alberta, for example, (Alberta Department of Education, 1973) suggested that decentralized school budgeting may be an effective mode for implementation.

The expectations for decentralized school budgeting thus lie in the areas of increasing sensitivity to local needs, achieving accountability, increased participation, efficiency and equity in resource allocation, and improved program budgeting.

Dysfunctions

Roe (1961:87), writing before recent trends, acknowledged the possible benefits of decentralized school budgeting, but argued that the practice tends to compartmentalize education, leads to inter-school rivalry and competition, and confusion among the public. He suggested that principals and teachers may spend time on budgeting to the detriment of other tasks, and that pressure groups and internal politics may lead to the situation getting out of hand. Roe (1961:87) concluded that:

> Carefully conceived centralized budgeting, using all techniques possible to obtain teacher and citizen participation in planning, will reap practically all the benefits of decentralized budgeting without running the danger of overcompartmentalizing the education process.

Jordan (1969:119) suggested that, under some circumstances, decentralized school budgeting might lead to role conflict:

> One disadvantage of the decentralized approach is that staff members at the local school may be called upon to spend unnecessary amounts of time in budget preparation -- time that should be devoted to the instructional process. Building personnel may lack the needed skills or may not have sufficient information because specialization of effort and efficiency develops when the budget is developed at the central office.

No research was located which examined the extent to which the concerns raised by Roe and Jordan have been realized, although the report by Levinson (1976) of the Alum Rock project, cited in the first section of this chapter, indicated dissatisfaction among school staff with the burden of work associated with budgeting.

Outcomes

Few studies were located which investigated the outcomes of decentralized school budgeting. The expectations and dysfunctions discussed above remain largely untested.

In the only doctoral study of the practice, Seward (1975) tested a critical assumption that schools will spend money differently than their counterparts in centralized systems. The sample consisted of elementary schools in two medium-sized San Francisco Bay Area school districts. One district had budgeting which was mostly centralized while the other permitted principals to have control over an extensive array of accounts. The districts were matched in respect to number of elementary schools, student population, proportion of minority groups, socio-economic status and student achievement. Table 4 lists the research hypotheses and findings for the study.

Two important findings by Seward in the decentralized district were the greater expenditure diversity within budget categories and the greater amount of time devoted to budgeting by principals. Other information collected in the study (Seward, 1975:73) revealed that:

> . . . the decentralized system has the advantage of more effectively written formal policies, inclusive budget calendar, extensive school site involvement in budgeting and comprehensive budget reporting to both the community and staff.

In another California study, Craig (cited by Moore, 1975:10) conducted a survey of the impact of decentralized school budgeting arrangements in public schools across the state and found a significant improvement in teacher morale. Craig found that decentralized school budgeting resulted in an increase in administrative costs.

Research in Alberta

The most recent Alberta studies which have investigated the extent of school involvement in the budget process are those of Finnman (1970) and Blacker (1971), both undertaken before the recent trends in decentralization of school budgeting noted by Ratsoy et al. (1976).

Data were gathered in the Finnman study in 1968 in twenty-six of

Table 4

Research Hypotheses and Findings for Seward (1975)
Study of Centralized and Decentralized School
Budgeting in California

Research Hypotheses	Finding
I. Resources will be allocated more equitabily in the decentralized district	Rejected
II. Expenditure diversity is greater in the decentralized district	Accepted: Supplies per pupil Centralized $ 8.88 - $10.89 Decentralized $ 5.35 - $23.15
III. Within the decentralized district, schools with more budget control will exhibit greater expenditure diversity than schools with less control	Accepted for only one of three years examined
IV. The cost of centralized business services will be greater in the decentralized district	Rejected: Per pupil costs Centralized $16.36 Decentralized $14.36
V. School resources expended on budgeting will be greater in the decentralized district	Accepted: Principals' weekly time Centralized 0 - 0.5 hours Decentralized 2 - 3 hours
VI. More budget control will be perceived at the school level in the decentralized district than in the centralized district	Accepted

the twenty-seven school divisions in the province. Finnman (1970:127) found that most divisions did not have written budget policies and that there was a general lack of involvement of trustees, principals, and teachers in the preparation process. Participation by teachers and principals was "very little" to "none," the only exception being "some" participation by principals in the areas of instructional aids and educational plans in general. Budget preparation was usually done by the Secretary-Treasurer, with the Superintendent completing the educational plan and estimates for instruction and instructional aids. Standardized allocations were frequently made on a per pupil basis for books and instructional supplies.

Finnman (1970:74) found that budget practice was incremental, with budgets from former years and annual financial reports being the most frequently used documents during preparation.

Blacker (1971) studied perceptions of school budget decentralization in elementary schools in the Edmonton Public system. An earlier study by Simpkins (1968) found that teachers in Edmonton tended to prefer increased participation in decision-making in a number of areas including budgeting. Blacker (1971:81) found that teachers' and principals' perceptions were in general agreement. Only for the budget items related to books did a majority of respondents perceive the school having more than "no" or "some" authority to reallocate expenditures prescribed by central office. Both groups expressed a desire for "considerable" authority or "autonomy" for every budget item listed, including staffing, with the exception of caretaking services. A similar pattern of responses was provided for actual and preferred participation in the initial allocation decision.

SUMMARY

This chapter reviewed trends in the United States and Canada where administrative decentralization has occurred through the formation of area units and delegation of authority to the school level. Contributing factors were demands for: (1) increased sensitivity to local concerns, (2) reversal of the effects of size and centralization, (3) accountability, and (4) professionalism and participative management. Goal statements reflected these factors. Studies of outcomes were generally inconclusive though several investigations of local decision-making found that the process tends to promote: (1) satisfaction, where an increase in participation is desired, (2) adaptability and flexibility, and (3) the resolution of interpersonal and interunit conflict. Problems of implementation and operation were consistent with those identified in Chapter 2.

Decentralized school budgeting, conforming to either a "resource allocation" or "personnel unit" model, was a major component of trends in the United States. Administrators were frequently identified as the major force for change. Expectations were related to increases in the following factors: sensitivity to local needs, accountability, participation, efficiency and equity in resource allocation, and program budgeting. A comparative study in two California systems found greater expenditure diversity and more time devoted to budgeting by principals in the more decentralized system. Apart from that related to role conflict, no research identified dysfunctions of the practice. No studies have been conducted of recent trends in Alberta, although several investigations in the early seventies found a preference among school personnel for an expanded role in budgeting.

Chapter 4

CONCEPTUAL FRAMEWORK, RESEARCH DESIGN, AND METHODOLOGY

Chapter 4 contains the conceptual framework, research design, and methodology of the study. The chapter begins with a review of the purpose and the problem for research. The associated sub-problems are provided. The conceptual framework for the investigation is developed from the theoretical background in Chapter 2 and the review of literature in Chapter 3. The methodology for the two stages of the study follows with details of purpose and preparation of instruments, reliability and validity, and collection and analysis of data. The chapter concludes with a statement of the delimitations, assumptions, and limitations of the study.

Purpose of the Study

The purpose of the study was to investigate the nature, objectives, adoption, operation, and perceived outcomes of decentralized school budgeting in Alberta.

Statement of the Problem

The problem for research is stated in twelve parts, with associated sub-problems, as follows:

1. How do school systems vary in the extent to which budget decisions have been decentralized to the school level?

1.1 To what extent do differences occur between the various types of school systems in respect to the degree of decentralization of budget decisions?

1.2 What is the relationship between student enrolment and the degree of decentralization of budget decisions?

1.3 What is the relationship between the number of schools in a system and the degree of decentralization of budget decisions?

1.4 What is the relationship between the dispersion of a school system and the degree of decentralization of budget decisions?

1.5 Which school systems have implemented decentralized school budgeting?

2. How does the political-legal framework in Alberta constrain the implementation of decentralized school budgeting?

2.1 How do provincial statutes and regulations limit the extent to which school systems can implement a form of decentralized school budgeting?

2.2 How do the policies of trustee and employee organizations limit the extent to which school systems can implement a form of decentralized school budgeting?

2.3 How do the various collective agreements between school boards and employees limit the extent to which school systems can implement a form of decentralized school budgeting?

3. What forces have influenced the introduction and development of decentralized school budgeting?

3.1 What conditions within school systems have influenced the introduction and development of decentralized school budgeting?

3.2 What conditions external to school systems have influenced the introduction and development of decentralized school budgeting?

4. What are the objectives of decentralized school budgeting?

4.1 What are the formally stated objectives of decentralized school budgeting?

4.2 What differences occur between the perceptions of central office administrators and principals in respect to the objectives of decentralized school budgeting?

5. What change strategies have been adopted by school systems to implement decentralized school budgeting?

5.1 What changes have been made in organizational structure, personnel, and the roles of personnel to implement decentralized school budgeting?

5.2 What periods of time have been required to implement decentralized school budgeting?

5.3 Were pilot projects conducted prior to system-wide implementation of decentralized school budgeting?

5.4 Which individuals or groups provided assistance during the period of implementation?

5.5 What in-service activities were conducted for central office and school personnel?

6. What problems have been encountered by school systems in implementing decentralized school budgeting?

6.1 What problems have been encountered by central office personnel in implementing decentralized school budgeting?

6.2 What problems have been encountered by school personnel in implementing decentralized school budgeting?

7. What procedures are followed to prepare and administer school budgets in school systems which have implemented decentralized school budgeting?

7.1 What procedures are followed at central office to prepare and administer school budgets in school systems which have implemented decentralized school budgeting?

7.2 What procedures are followed at the school level to prepare and administer school budgets in school systems which have implemented decentralized school budgeting?

8. What operational problems have been encountered in school systems which have implemented decentralized school budgeting?

  8.1 What operational problems have been encountered by central office personnel in implementing decentralized school budgeting?

  8.2 What operational problems have been encountered by school personnel in implementing decentralized school budgeting?

9. How do central office administrators and principals perceive the effects of decentralized school budgeting on the frequency and severity of disagreements related to school budgeting?

10. What differences occur between the perceptions of central office administrators and principals in respect to the extent to which the objectives of decentralized school budgeting have been attained?

11. What changes to current decentralized school budgeting practice are preferred by central office administrators and principals?

12. What differences occur between central office administrators and principals in respect to the extent of their satisfaction with current decentralized school budgeting practice?

CONCEPTUAL FRAMEWORK

A framework for the study was derived in Chapter 2 from the concepts of decentralization, organizational change, and budgeting. A theoretical background was developed against which the review of literature in Chapter 3 was presented. At this point, it is useful to summarize those concepts, definitions, and theoretical perspectives within which the investigation was conducted. These constitute the conceptual framework for the study.

Decentralized School Budgeting

Decentralization was conceptualized in Chapter 2 in terms of a movement of authority to make decisions away from a central source of power. A distinction was made between administrative decentralization, or a delegation of authority within a bureaucracy, and political decentralization, or a transfer of authority to a subjurisdiction. The review of literature in Chapter 3 indicated that the essence of decentralized school budgeting was the delegation, from officials within the central office of a local jurisdiction to the principal, of authority to make decisions in respect to the preparation and administration of school budgets. The delegation was subject to constraints established by central office officials, who could revoke the delegation at any time, with the authority for final approval on all matters related to school budgets retained by trustees. The delegation was systematic, in that it conformed to a policy or established procedure, and was consistent in terms of its uniform application throughout the jurisdiction.

The following definitions, consistent with the above conceptualization, were adopted for the study:

Decentralization. Decentralization is the systematic and consistent delegation of authority from central office to the school.

School budget. A school budget is a fiscal plan for implementing school objectives, policies, and programs for a fiscal year, embodying: (1) descriptions of school activities and services required to attain goals; (2) estimates of expenditures and other allocations; and (3) forecasts of fiscal resources available to support the plan.

Decentralized school budgeting. Decentralized school budgeting is the systematic and consistent delegation from central office to the school of authority to make budget decisions.

Centralized school budgeting. Centralized school budgeting is the systematic and consistent retention by central office of authority to make decisions concerning school budgets.

Degree of Decentralization

The conceptualization of decentralization developed in Chapter 2 indicated that centralization and decentralization were best considered as opposites on a continuum, with terms such as "more" and "less" required for comparative purposes.

Seward (1975) proposed that the extent of decentralized school budgeting can be determined by calculating the total number of budget categories over which schools have authority. Budget categories are the budget account classifications typically used or required in school system account documents. Systems which provide schools with authority over ten accounts, for example, were considered by Seward to be more decentralized than those which provide authority over two accounts. This criterion for comparison was included in the framework for this study. Two limitations of this approach are that it does not take account of: (1) the amount of money involved, either in total or separately in the various accounts, and (2) the perceived importance of the discretion provided in one account compared to another. These limitations gave rise to an assumption for the study; namely, that the Seward criterion provided a satisfactory measure for the degree of decentralization.

Another criterion was established for comparing the degree of decentralization in specific budget categories. One system may be considered more decentralized than another in respect to the delegation of authority in the instructional supplies' category, for example, but might be less decentralized in the instructional salaries' category. Moran (1971:208) suggested the basis for this type of comparison:

> One organization is more decentralized than another comparable organization to the extent that similar decisions, of approximately equal importance in each organization, are made at a lower level in the first organization than in the second.

Budget Process

The conceptualization of budgeting was shown in Chapter 2 to have undergone considerable change since the early years of this century. While the extent to which the contemporary view is practised seems to vary, the common tasks in all perspectives are: (1) the preparation of the budget, (2) the adoption of the budget, and (3) the administration of the budget. These three tasks were included in the framework for the study.

The central role of elected trustees in the adoption of the system budget is recognized. The role of the school in decentralized school budgeting is therefore largely confined to the preparation and administration of the school budget. The tasks of purchasing and accounting are included in the task of administration of the budget.

Organizational Change

A number of models describing the various stages of organizational change were presented in Chapter 2. Each of these provides a useful framework for the analysis of the change process. It was stressed that not all stages of the various models will appear in a particular situation.

The model developed by Mann and Neff (1961) was included in the framework for this study because it generally encompassed the stages of the other models and included explicit reference to the state of the organization before change. This model served as a guide in the preparation of instruments and in the analysis of data. Mann and Neff (1961:3) listed the five stages of the model as:

1. The steady state of the organization before change.
2. The recognition of a need for change.
3. Planning for the change.
4. Taking the action steps to make the change.
5. Stabilizing the change.

The sub-problems for research recognized the dual nature of forces which give rise to the felt need for change, namely, external and internal forces. The framework for the consideration of external forces proposed by Hall (1972:298-306) was used for the analysis of responses. Hall classified environmental conditions as technological, legal, political, economic, demographic, ecological, and cultural, and suggested further that these may be either general conditions for all organizations or specific influences which originate from organizations and individuals with which an organization is in direct interaction.

The various classifications of internal forces were outlined in Chapter 2. Although there was agreement that the felt need for change arises from a disequilibrium between subsystems, there was no consistency among the writers in respect to the nature of those subsystems. No classificatory scheme was included in the conceptual framework for the analysis of data other than to list the factors according to the individuals and groups articulating the interest or concern. This approach is consistent with the political model of change proposed by Baldridge (1971) and reviewed in Chapter 2.

RESEARCH DESIGN

The need for a broad, exploratory investigation of recent trends in decentralized school budgeting was established in Chapter 1. This was considered a special need in Canada where, unlike in the United States, no descriptions of the practice exist.

Katz (1953:74) indicated that "the exploratory study attempts to see what there is rather than to predict the relationships that will be found." Kerlinger (1973:406) suggested that exploratory studies have three purposes: "to discover significant variables in the field situation, to discover relations among variables, and to lay the groundwork for later, more systematic and rigorous testing of hypotheses." The research design for this study was consistent with these perspectives.

The first part of the problem for research posed the question: "How do school systems vary in the extent to which budget decisions have been decentralized to the school level?" This question suggested the need, in the first instance, for a descriptive survey, the purpose of which was described by Good (1972:208), as "to secure evidence concerning an existing situation or current condition . . . ."

The other parts of the problem statement generally focused on the objectives, adoption, operation, problems, and perceived outcomes of decentralized school budgeting. Such a broad perspective suggested the need for a case study approach, consistent also with the view of La Noue and Smith (1973:33) that detailed, case study investigations may reveal more meaningful information about decentralization than the many studies which use aggregate data. This aspect of the research design conforms to the characteristics of a case study suggested by Shaw (cited by Gee, 1950:230):

> Case study method emphasizes the total situation or combination of factors, the description of the process or sequence of events in which behaviour occurs, the study of individual behaviour in its total setting and the analysis and comparison of cases leading to formulation of hypotheses.

The examination of change strategies in this study was facilitated by the case study approach, which Walton (1972:76) noted "can attend to aspects of a change program which other methodologies cannot: namely, the processes of change and of change interventions."

The limitations of the case study method were recognized, especially with respect to generalizability. Mouly (1970:348) observed that:

> The study of five or six cases can provide insight into the dynamics of human behavior and its antecedents but, since it is not likely to permit the isolation of crucial factors, the extent to which it can lead to valid generalizations is extremely limited.

Summary

The research design suggested by this analysis was for the study to be conducted in two stages: (1) a survey of all school systems in Alberta to obtain information concerning the distribution of authority between central office and the school in the preparation and administration of school budgets, and (2) the selection of school systems, each with a relatively high degree of decentralized school budgeting, to serve as cases for the analysis of objectives, adoption, implementation and perceived outcomes of the practice.

METHODOLOGY
STAGE 1

Purpose

The purpose of the first stage of the study was to respond to the following parts of the research problem:

1. How do school systems vary in the extent to which budget decisions have been decentralized to the school level?
2. How does the political-legal framework in Alberta constrain the implementation of decentralized school budgeting?

Questionnaire

In determining the appropriate method for gathering data, Gorden (1975:39) advised that "gradually, the question has shifted from 'Which method is the most valid?' to 'Which method is best suited for what purpose under what circumstances?'" The purpose of the first stage, especially the identification of systems which had implemented a form of decentralized school budgeting, suggested the need to obtain information from all school systems in Alberta. A mail questionnaire was considered the appropriate method in view of the large area involved.

Kerlinger (1973:414) noted the serious drawbacks of the mail questionnaire, two of which are the possible low rate of response and inability to check the response alternatives provided. He suggested that every effort should be made to obtain a return of at least eighty to ninety percent. The procedures employed in this study to secure a high rate of return are summarized below.

There were six parts to the questionnaire, a copy of which is contained in Appendix A. The first sought demographic information about each system: number of students, number of schools at each level, number of central office personnel, area, distance from furthest school, and size of school system budget. The second part sought information concerning the decision-making process used in the development of school budgets prior to consideration of the system budget by the board. A list of twenty-seven school budget items was provided grouped into five budget categories. These items were derived from the second and first level objects of expenditure, respectively, of the Program Accounting and Budgeting system of classification required (Alberta, Department of Education, 1975) for Alberta schools. Other criteria for inclusion were that the items should be: (1) directly related to the school program, (2) typical of those which might appear in a school budget for any level of a school system, (3) generally, only one item from each classification, and (4) approximately twenty-five in number. Respondents were requested to select the response which best described the level at which the decision on the amount to be included in a school budget is made, and the extent of school participation in that decision.

The response alternatives provided in the second part of the questionnaire were consistent with the conceptualization of decentralization developed for the study. These were:

CENTRAL OFFICE DECISION NO SCHOOL PARTICIPATION	Central office determines the amount to be included. The school does not usually participate in the decision-making process.
CENTRAL OFFICE DECISION SCHOOL PARTICIPATION	Central office determines the amount to be included. The school usually participates by providing statements of needs, preferences and priorities or by making a recommendation on the amount.

SCHOOL DECISION CENTRAL OFFICE CONFIRMS	The school determines the amount to be included subject to the limits of a lump-sum allocation. Central office does not usually participate except to provide appropriate checks to ensure conformity with Department of Education regulations and guidelines, existing board policy, and the terms of collective agreements.

The second and third parts taken together reflected the conceptualization of the budgeting process included in the framework for the study. The second focused on the preparation of the school budget prior to consideration of the system budget by the board while the third focused on the administration of the budget following the adoption of the system budget. The third part considered operational flexibility; that is, the extent to which schools have the authority to reallocate within and between categories following adoption. The response alternatives were:

NO DISCRETION	The school has no discretion. Transfers can only be made by central office or the board.
MODERATE DISCRETION	The school has discretion to make transfers within predetermined limits. Transfers beyond these limits can only be made with central office or board approval.
HIGH DISCRETION	The school has discretion to make any transfer within the limits of its budget allocation.

The fourth part of the questionnaire sought information concerning the extent to which system policy provided for a school to carry an operating surplus or deficit the following budget year. This was considered an indicator of another aspect of school authority in the budget process. The fifth part contained items which sought the identification of systems which had recently adopted policies and procedures which significantly increased the degree of budget authority at the school level.

The final part of the questionnaire requested respondents to supply copies of policy and procedure to help the researcher gain an understanding of the budgeting process.

Provision was made in each part of the questionnaire for respondents to elaborate on responses given in the more structured sections.

Respondents

The superintendent was selected to respond to the questionnaire because of his position as the senior educator in each school system. He also filled the role of "key informant," defined by Gorden (1975:187-8) as "any person who gives information relevant to any of the strategy problems of a study . . . he helps by supplying information on the local field situation."

Validity

Kerlinger (1973:457) observed that "the commonest definition" of validity is epitomized by the question: "Are we measuring what we think we are measuring?" A test of content validity was used for the questionnaire. Kerlinger (1973:458) defined content validity as:

> . . . the representativeness or sampling adequacy of the content--the substance, the matter, the topics--of a measuring instrument. Content validation is guided by the question: Is the substance or content of this measure representative of the content or the universe of content of the property being measured?

A panel of thirteen persons was assembled to assess the content validity of the questionnaire. Nine were currently employed or had recent experience in field situations while four were professors in the Department of Educational Administration, University of Alberta. Three of the former group were employed by the Department of Education with two of these having past experience as superintendents and direct involvement in the development of Alberta's Program Accounting and Budgeting (PAB) System. The third was recently coordinator of a Regional Office of Education. Other members were a superintendent on study leave, a senior official with the Alberta School Trustees' Association and former principal, a principal on study leave, a senior school system administrator with experience in implementing a form of decentralized school budgeting, a school system secretary-treasurer recommended by the President of School Business Officials of Alberta, and a teacher. Eight of the nine persons had direct experience with both centralized and decentralized budgeting practice.

Members of the panel were given copies of the draft questionnaire, an outline of the purpose of the study, the list of criteria used to select items, a list of the PAB budget classification and a draft of the covering letter. They were asked to comment on the questionnaire in respect to the appropriateness of items, response categories, rubric, format and language. All provided detailed written and verbal comments.

Reactions of the panel were incorporated in a second draft which was distributed again for further comment. The final form of the questionnaire was then prepared.

An informal confirmation of criterion validity was afforded when superintendents in the study returned completed questionnaires. Criterion validity is studied (Kerlinger, 1973:459) by "comparing test or scale scores with one or more external variables or criteria, known or believed to measure the attribute under study." With one exception noted in Chapter 8, there was general consistency between statements of policy and procedure furnished by superintendents and questionnaire responses.

Reliability

Gorden (1975:6) indicated that reliability refers to "the probability that an observation if repeated at a different time by the same person, or at the same time by another competent observer, will give the same result."

No formal procedures to establish the reliability of the questionnaire were adopted. The decision to include all school systems in the first stage meant that no sample of systems or superintendents could be involved in a pilot test. The rigorous examination by the expert panel described above facilitated the refinement of the instrument but, in a formal sense, its reliability was assumed.

Data Collection

The questionnaire was mailed to all superintendents on November 10, 1976. Covering letters from the researcher and the Executive Director of the Alberta School Trustees' Association were enclosed along with a stamped, addressed envelope for return. A reminder letter was mailed on November 26, 1976, to those who had not responded. A second reminder, with another copy of the questionnaire, was mailed December 10, 1976. Telephone calls were made to those outstanding on December 16 and 17, 1976. These procedures secured a response rate of ninety-five percent for the 138 school systems. Ten school systems did not employ a superintendent. For these, the questionnaire was mailed to the Secretary-Treasurer with the request that it be completed by the person who provided the services of a superintendent or by the Secretary-Treasurer personally. Responses were received from nine of these systems.

Copies of the questionnaire and covering letters are included in Appendix A.

Analysis of Data

The criterion described by Seward (1975) and included in the conceptual framework was used in two ways to determine the degree of decentralized school budgeting. For responses to Section B of the questionnaire, concerned with school budget authority during *preparation* of the budget, the total number of budget items for which a school decision on allocation is made was determined for each system. For responses to Section C, concerned with operational flexibility *following adoption* of the budget, the total number of transfers for which a school has high discretion was determined for each system. School systems falling in the top twenty-five per cent of scores thus produced were considered to be highly decentralized in respect to: (1) School Budget Authority, or (2) Operational Flexibility, or (3) both School Budget Authority and Operational Flexibility. These criteria established the operational definitions of decentralized school budgeting in the study.

A preliminary analysis of responses was made on December 15, 1976, when the response rate had reached eighty-two per cent, in order that school systems to be included in the second stage of the study could be identified and preliminary arrangements made. All superintendents were advised in the covering letter of November 10, 1976, that the selection would be made in early December. An analysis of returns subsequent to December 15 indicated that the selection of systems would not have been altered by their inclusion. All responses were included in the detailed analysis performed in early 1977 and described below.

The detailed analysis of data was completed using programs in descriptive statistics in the Statistical Package for the Social Sciences (Nie, et al., 1975) and the computer facilities of the Division of Educational Research Services, University of Alberta. Descriptive rather than inferential statistics were employed since no generalizations from a sample of a population were required.

Additional comments provided by superintendents and information from statements of policy and procedure were summarized and classified. There are summarized in Chapter 5 along with the analysis of questionnaire data.

Determination of Political-Legal Constraints

The first stage of the study also responded to the question "How does the political-legal framework in Alberta constrain the implementation of decentralized school budgeting?" The sub-problems focused on the constraints which might be applied by provincial statutes and regulations, the policies of trustee and employee organizations, and the various collective agreements.

Information was sought from three organizations established by provincial legislation; namely, the Department of Education, the Alberta School Trustees' Association, and the Alberta Teachers' Association.

Letters were written to the Director, Field Services Branch, Department of Education; the Executive Director of the ASTA; and the Executive Secretary of the ATA; requesting: (1) copies of relevant documents, and (2) a meeting with a representative who could respond to questions and provide further information. Meetings were conducted with representatives of the Department of Education and the ATA. The ASTA had no policy related to decentralized school budgeting. Copies of the letters and questions are contained in Appendix B.

The information related to political-legal constraints included in Chapter 5 was drawn largely from published documents. A summary of one interview was returned to the one person quoted directly in order to confirm the accuracy of his statements.

METHODOLOGY
STAGE 2

The second stage of the study provided the central focus of the investigation; namely, an analysis of the objectives, adoption, operation, and perceived outcomes of decentralized school budgeting.

Data were gathered by interviews with central office personnel and principals and through a review of relevant documents. Procedures for the selection of school systems and respondents, and details of the preparation and pilot test of instruments, reliability and validity, collection and analysis of data are set out below.

Selection of School Systems

Seven school systems were selected using data gathered in the first stage of the study. Each had a relatively high degree of decentralization, operationally defined as scoring at the seventy-fifth percentile or higher on either or both of the School Authority Scale and the Operational Flexibility Scale included in the questionnaire completed by superintendents.

Six systems were chosen to reflect differences in size, type of jurisdiction, type of decentralized budgeting, and the number of years' experience with the practice. A seventh system, Edmonton Public, was included because of the special nature of its pilot project in decentralized budgeting.

Interviews

The broad, exploratory nature of the study suggested a central role for the interview as a method for gathering data. Kerlinger (1973:480) identified three main purposes for the interview: (1) exploration, (2) measurement, and (3) supplementing other methods of gathering data. The interview accomplished all three in this study.

Gorden (1975:61) developed a classification of interviewing styles which enable the interview to respond to differing emphases on exploration and measurement. The standardized interview, designed to collect precisely the same categories of information from respondents, has two sub-types:

> The scheduled interview not only specifies the questions in advance but also uses the questions in the same order for each respondent. The nonscheduled interview gives the interviewer some choice as to the order of the questions, freedom to attempt alternative wording . . . and freedom to use neutral probes . . . .

A less-structured interview facilitates the exploratory approach more effectively than the questionnaire in the manner suggested by Gorden (1975:39):

> Whether the interview is more valuable than the questionnaire depends on the degree to which we know exactly what we want to know and what the possible range of answers might be. The exploratory values of the unstructured interview are impossible to attain in a questionnaire where there is no opportunity to formulate new questions or probe for clarification.

The various problems and sub-problems for investigation, when considered in the light of the nature of the study, suggested the use of an interview with varying degrees of structure supplemented with a review of relevant documents.

Selection of Respondents

Decentralized school budgeting was defined in this study as the systematic and consistent delegation from central office to the school of authority to make budget decisions. The definition suggested that central office personnel and principals should be the main respondents.

While the strengths of the interview in a study of this kind were noted above, its shortcomings required that the number of respondents be sharply delimited. Kerlinger (1973:480) documented these shortcomings:

> The major shortcoming of the interview and its accompanying schedule is practical. Interviews take a lot of time. Getting information from one individual may take as long as an hour or even two hours. This large time investment costs effort and money.

The superintendent in each system was regarded as the key informant in the selection process for central office personnel. He was requested to provide the names of: (1) central office personnel and others who were influential in the decision to decentralize school budgeting, and (2) central office personnel with major responsibilities in the budgeting process. In two instances, the superintendent delegated this informant role to a subordinate.

A modified "reputational" approach (Matthews, 1967; Prout, 1977) was used to supplement this procedure. Each person named and subsequently interviewed was also asked to indicate persons influential in school budgeting. Additional individuals identified in this way were interviewed when a key role was indicated.

Three criteria were employed to identify principals in the six systems other than Edmonton Public. These were: (1) a maximum of six, to accommodate the limitations of the interview technique; (2) the inclusion of representatives of the different levels of the school system; and (3) respondents should have at least one year of experience in the principalship in the system before decentralized school budgeting was implemented. All seven principals in the Edmonton Public pilot project were interviewed.

The procedures used to satisfy the three criteria set out above varied with the size of the system. All principals were interviewed in the small systems. A stratified, random sampling procedure was employed in the medium-size systems. For the larger systems, where a sample of six was too small to be meaningful, the presidents of principals' organizations for the last two years or members of other representative groups were selected. The case method adopted for the study and the constraints of the interview technique thus precluded the use of uniform selection procedures.

Interview Schedules

The various forms of the interview schedule reflected, in the first instance, the different parts of the problem statement under investigation in this stage of the study. Each respondent provided information related to parts 3 to 8. Parts 9 to 12, however, were delimited in the problem statement to principals and central office administrators, with the latter defined in this study as professional educators employed at the central office or at area offices of a school system who are influential in school budgeting. Central office personnel included in the selection who were *not* professional educators responded only to questions concerning their role in matters related to parts 3 to 8.

The forms used in Edmonton Public were subject to a constraint imposed by that system which was in the first months of its pilot project at the time of data collection. Consent to conduct the study was given providing no evaluation of outcomes was undertaken. The questions used in Edmonton Public were also restricted to matters related to parts 3 to 8.

Basic interview forms were prepared for the superintendent, other central office administrators, and principals in the six systems other than Edmonton Public. The nature of each form was dictated to a large extent by the different sub-problems, although the conceptual framework for the study guided the formulation and ordering of questions. Six sections were included in each form:

1. Personal information concerning experience and education was sought from each respondent. Principals were asked to provide additional information about their schools.

2. The various models for organizational change, especially that developed by Mann and Neff (1961), suggested the nature and order of questions on the adoption of decentralized school budgeting. Questions concerning the state of the organization before change, forces promoting

adoption, the recognition of a need for change, planning for change, and taking steps to make the change were included.

3. The conceptualization of the budgeting process as: (i) preparation, (ii) adoption, and (iii) administration, established the form and order of questions related to the operation of the practice following the first year of implementation.

The second and third sections also sought information concerning problems encountered by respondents and their perception of problems encountered by others. Comparisons were sought in both sections with the roles and procedures established before decentralization. Questions were included on disagreements related to school budgeting and the perceived effect of decentralization on their frequency and severity.

4. Respondents were asked to indicate their perception of the value and extent of attainment of a set of eight objectives derived from the review of literature in Chapter 3 and the documents provided by school systems in the first stage of the study. These objectives may be broadly classified as relating to the principle of subsidiarity (two), equity, efficiency, flexibility (two), adaptability, and accountability. The structure in this section was derived from that employed in the evaluation of administrative decentralization conducted in Los Angeles (Los Angeles, City Board of Education, 1973).

5. Respondents were invited to identify areas for change and to indicate their preference for future patterns of decentralized budgeting.

6. The final section of the forms asked respondents to indicate the extent of their satisfaction with the current form of decentralized school budgeting in their system.

Varying degrees of structure were included in the interview forms. Items concerning roles, disagreements, objectives, and satisfaction were scheduled in a highly structured fashion, while those concerning the adoption process, general operation and preferred change were open-ended. In some instances, especially those dealing with problems and operation, the form assumed the characteristics of an interview guide, which Gorden (1975:74) contrasted with an interview schedule in these terms:

> The _interview guide_, in contrast to an _interview schedule_, provides only an outline or checklist of the topics and subtopics to be covered but does not specify a sequence . . . . The interviewer is not only free to vary the sequence of topics and subtopics to fit the situation but he may also return to a topic more than once. He is free to omit questions suggested by the guide if he feels that the information was already obtained indirectly. He is also free to add questions and reword others when this will help convey the meaning.

Abbreviated forms of the basic interview schedules were used for central office personnel other than professional educators and in Edmonton Public. Appropriate changes of wording were also made for Edmonton Public where the practice is known as "school-based budgeting."

Copies of the basic interview schedules are contained in Appendix C.

Validity

Kerlinger (1973:480) stressed that interviews and interview schedules should be subject to the same criteria of validity and reliability as other measuring instruments. To this end, the various drafts of the interview schedules were subjected to critical examination and pre-test.

The content validity of the interview schedules was established using similar procedures to those employed in the first stage of the study. A panel of twelve persons was assembled, most of whom had previously reviewed the questionnaire. The major change was the replacement of two persons having Department of Education experience and one having superintendency experience by two principals and one assistant principal. The reconstituted group comprised three professors in the Department of Educational Administration, two officers of the Department of Education, three principals from different levels in two school systems, an officer of the ASTA, two assistant principals one of whom is a past-president of a large urban ATA local, and one teacher. Appropriate combinations of the group reacted to drafts of the basic forms of the interview schedules. Members of the panel were provided with a statement of purpose for the study and were asked to comment on the appropriateness of items, response categories, rubric, format, and language. Written and verbal comments included a number of recommendations for change which were incorporated in new schedules used in a pilot test in a field situation.

PILOT TEST

Purpose

Fox (1969:66) suggested several purposes for a pilot study:

> It may be designed to provide a trial run data-collection approach. It may be intended to test out the data-collection method or an instrument to see if it is in need of revision. It may be done to provide some pilot data to test out the data-analysis techniques planned. It may be intended to see if the subjects of the research can handle the data-collection instruments, or it may be intended to give the research staff experience . . . .

A pilot test of the interview schedules was conducted to meet all of these purposes. The procedures employed and amendments which resulted are set out below.

Selection of System

A pilot test was conducted in a school system selected at the completion of the first stage of the study. This system was of medium size, served a mixed urban-rural population, and had implemented decentralized school budgeting over a number of years. It ranked sixth of 131 systems on the School Budget Authority Scale. Central office personnel were selected for interview using the procedures adopted for the study. Two groups of principals were interviewed. A stratified, random sample of six was selected from the nineteen who had at least one year of experience when the system was relatively centralized. Additional interviews were conducted with officers of the Principals' Association for the last two years who were not included in the sample.

Reliability

Kerlinger (1973:480) indicated that to achieve reliability using interviews is no small problem in that "interviewers must be trained; questions must be pretested and revised to eliminate ambiguities and inadequate wording."

The pilot test of the interview schedules afforded the opportunity to improve their reliability. Reliability was indicated when different persons interpreted questions in the same fashion. Amendments were made where ambiguities were revealed. The reliability was enhanced in the study by having all interviews conducted by the same individual and by the critical examination of an expert panel.

Final Form of Schedules

The pilot test resulted in further refinement of the schedules. Several items were deleted while others were reworded or reordered. It was found that representatives of the Principals' Association were able to generalize their responses and give information consistent with that provided by the sample on the same items. The proposed data analysis techniques were found to be appropriate.

It was initially planned to collect additional data related to the actual and preferred extent of decentralization and perceptions of outcomes using a questionnaire mailed to all central office administrators and principals in the school systems included in the second stage of the study. A draft of the questionnaire was reviewed by the panel examining the drafts of the interview schedules. The reaction of panel members was that the questionnaire, while valid in content, was too long. The pilot test of interview schedules confirmed this assessment.

It was apparent that excessive demands would be made on the time of respondents if they were asked to complete both interview and questionnaire. It was decided that the purposes of the study would be met by: (1) replacing the lengthy and highly structured questions on actual and preferred extent of decentralization with appropriate interview items, and (2) incorporating the other questionnaire items in the interview schedules. The decision to make these changes was taken following the pilot test of the interview schedules.

DATA COLLECTION AND ANALYSIS
STAGE 2

Data Collection

Superintendents of school systems selected for the second stage of the study were asked in mid-December, 1976, for approval to proceed with the study. Approval was granted in each instance. Superintendents were also asked to provide: (1) an organizational chart for central office, (2) the names of school principals, (3) the names and positions of central office personnel and others who were influential in the decision to decentralize school budgeting, (4) policy statements related to budget practice if these were not provided in the first stage, (5) handbooks, guidelines, and forms used in the preparation of school budgets, and (6) reports, recommendations or other material which might assist the researcher gain a better understanding of budget practice.

Persons to be interviewed were selected using the procedures outlined earlier in this chapter. Consent was given in each instance and appointments made. Eighty persons were interviewed between February 1 and March 23, 1977. Thirty-six were central office personnel and forty-four were principals.

The purposes of the study were explained to each respondent and confidentiality of responses was assured. The advantages and disadvantages (Good, 1972:253) of tape recording the interviews were considered. A decision was made to use the tape recorder in view of the number, length, and complexity of the interviews.

Respondents were given copies of the more structured items in the schedules to facilitate their response. A funnel sequence of questioning was employed where items were set out as an interview guide only. Gorden (1975:415) described the technique as one in which "each successive question has a narrower scope than the previous one and is either included within or related to the previous question." Neutral probes were used in a manner consistent with the nature (Gorden, 1975:61) of a semi-structured interview.

Questions related to the procedures employed in the preparation and administration of school budgets were included in the interview schedule for superintendents. In four of the seven systems, however, the Superintendent requested that another person at central office provide this information. Changes of this kind were facilitated by the flexible nature of the interview schedules.

Documents identified during the interviews as being relevant to the study were added to those provided earlier by each superintendent. Minutes of school board meetings were examined where uncertainty existed on dates and the sequence of events.

One executive meeting of the Edmonton Public Local of the ATA was attended. The meeting with a representative of the ATA in the first stage of the study had revealed that decentralized school budgeting in Edmonton Public was being monitored by the Local. The principals of the seven schools in the pilot project in that system were interviewed by the executive. The minutes of this meeting were also obtained.

Analysis of Data

The tape recordings of the interviews were transcribed and reduced to a standard form by content analysis. Gorden (1975:61) indicated the need for this process with the non-scheduled interview:

> To keep within the requirements of a standardized interview . . . the nonscheduled interviewer must either initially record the responses on a standardized form, or reduce the free flow of information to a standard form, later, by a process of content analysis. Otherwise there is no way individuals can be clearly compared, or the aggregative response of the group summarized statistically.

Holsti (1969:14) defined content analysis as "any technique for making inferences by objectively and systematically identifying specified characteristics of messages." Holsti (1969:95) cited Kerlinger (1964) in describing the characteristics of categories developed in the process:

> . . . categories should reflect the purposes of the research, be exhaustive, be mutually exclusive, independent, and be derived from a single classification principle.

These criteria were followed in establishing categories not included in the interview schedule or explicitly suggested in the conceptual framework of the study. Table 5 lists the categories used in the analysis.

Data were reported by frequency count of responses in the various categories established for analysis. Several sub-problems called for an investigation of differences which occurred among the perceptions of central office administrators and principals. Inferential statistics were considered to be inappropriate to report such differences since the central office personnel who were interviewed were not representative respondents and no generalization to a population of central office personnel would be meaningful. The procedures employed to select the principals for interview were designed to obtain the best group, given the limitations of the interview technique, rather than a random sample, although in three systems all principals were interviewed. In two other systems, a stratified random sample of principals was selected from among a sub-group determined on three criteria, while in the remaining two

Table 5

Classifications Established for Content Analysis in Stage 2 of Study

Variable	Classification Used in Analysis	Source in Conceptual Framework
Internal factors underlying change	Individuals and groups articulating interest	Baldridge (1971)
External factors underlying change	Technological, legal, political, economic, demographic, ecological, and cultural conditions	Hall (1972)
Objectives	Subsidiarity, equity, efficiency, flexibility, adaptability, accountability	Review of literature; Stage 1 of study
Problems	1. By level: central office and school 2. By process: preparation and administration of budget	1. Conceptualization of decentralization 2. Conceptualization of budgeting
Disagreements	1. By level: within and between the school and central office levels 2. By process: preparation and administration of budget	1. Conceptualization of decentralization 2. Conceptualization of budgeting
Changes Preferred	School budget authority, operational flexibility, carrying a surplus or deficit	Conceptualization of decentralized school budgeting

systems, officers of the Principals' Association or other representative bodies were chosen.

Taking all factors into account, tests of statistical significance were not employed. A simple comparison of frequency of response was employed using the notion of "important" differences (Cormier, 1971) to respond to the sub-problems for research.

Verification

A first draft of each chapter describing practice in the various systems was mailed in June, 1977, to each central office administrator with a major role in decentralized school budgeting. Each was asked to verify the accuracy of the facts and that, as far as possible, the confidentiality of opinion had been maintained. Amendments were incorporated in the final draft. This request was not made of principals and others who provided information which was consolidated in the analysis. Approval was given by each Superintendent to naming his system in the dissertation.

DELIMITATIONS, ASSUMPTIONS AND LIMITATIONS

Delimitations

The study was delimited in four ways as follows:

1. The study was delimited to school systems in the province of Alberta.

2. The gathering of data related to the objectives, adoption, operation, and perceived outcomes of decentralized school budgeting was delimited to six school systems which had at least one year of experience

with the practice and to a seventh system in the first year of a pilot project.

3. Interviews were conducted in each system with a selected group of central office administrators, principals, and other persons influential in school budgeting.

4. Information relating to the operation of decentralized school budgeting was delimited to the policies and procedures in effect in 1976 and 1977. The perceptions and recollections of respondents were gathered over a period of seven weeks in February and March, 1977.

Assumptions

The various procedures designed to increase the validity and reliability of the instruments were outlined earlier in this chapter. However, the lack of a formal pilot test of the questionnaire and the nature of the interview technique called for certain assumptions of validity and reliability:

1. It was assumed that the total number of budget categories over which schools had authority provided a satisfactory measure of the degree of decentralized school budgeting in a system. The limitations of this approach were discussed earlier in this chapter.

2. It was assumed that all superintendents interpreted the questionnaire in the manner intended and that their responses accurately reflected policy and procedure related to school budgeting.

3. It was assumed that persons selected in the second stage of the study were able and willing to accurately report the practice in the system and recall details of its adoption.

4. It was assumed that the procedures employed to select the

respondents in the second stage secured the best group of central office administrators and, in the case of principals, a group which would report practice and perceptions of principals generally in each system.

Limitations

The research design and methodology established a number of limitations for the study:

1. The investigation was essentially a set of case studies in a small number of school systems in Alberta. The generalizability of the findings to other school systems in the province and elsewhere which have decentralized or plan to do so is therefore limited by the diversity of factors which distinguish the systems.

2. The extent to which factors other than budget practice affect outcomes limits the extent to which causal factors can be implied in the findings. Kerlinger (1964:390) summarized the weakness of a field study of this kind:

> Despite . . . strengths, the field study is a scientifically weak cousin of laboratory and field experiments. Its most serious weakness, of course, is its ex post facto character. Thus statements of causal relations are much weaker than they are in experimental research.

3. The assumptions set out above were necessary for the analysis of the data. However, the limitations of the study created by the choice of methodology are recognized. Kerlinger (1964:390) continued his discussion of the weakness of field studies by noting the "lack of precision in measuring field variables." The reliance on perceptions and the limited number of respondents contributed to this lack of precision.

SUMMARY

The purpose of the study was to investigate the nature, objectives, operation, and perceived outcomes of decentralized school budgeting in Alberta. The conceptual framework was derived from the concepts of decentralization, organizational change, and budgeting (Chapter 2) and from the review of literature (Chapter 3). The first stage of the study involved a descriptive survey to determine the nature and extent of current practice in Alberta. A questionnaire was validated and mailed to all superintendents. The degree of decentralization in each system was determined using a School Budget Authority Scale and an Operational Flexibility Scale with a ninety-five percent response rate permitting the use of descriptive statistics in the analysis of data. The nature of political-legal constraints was determined by an analysis of provincial statutes and regulations and policy statements of The Alberta Teachers' Association and the Alberta School Trustees' Association.

A case study approach was adopted in the second stage to investigate the objectives, adoption, operation, and perceived outcomes of the practice. Data gathered in the first stage were used to identify seven school systems with a relatively high degree of decentralization and varying organizational characteristics. Interview schedules were validated and pilot-tested, and then administered to central office administrators and a group of principals in each system.

The low level of generalizability of the findings was noted as the major limitation of the study.

Chapter 5

DECENTRALIZED SCHOOL BUDGETING IN ALBERTA

This chapter provides an analysis of data collected in the first stage of the study. The political-legal framework of education in the province is examined to identify factors which serve as constraints on decentralized school budgeting. The results of the questionnaire survey of all school systems in Alberta are then presented and the data analyzed to determine the relationship between the degree of decentralized school budgeting and: (1) type of system, (2) student enrolment, (3) number of schools, and (4) dispersion. Systems with decentralized school budgeting are identified with seven selected for further investigation in the second stage of the study.

I. POLITICAL-LEGAL CONSTRAINTS

The following problem and associated sub-problems were posed as part of the study:

2. How does the political-legal framework in Alberta constrain the implementation of decentralized school budgeting?

    2.1 How do provincial statutes and regulations limit the extent to which school systems can implement a form of decentralized school budgeting?

    2.2 How do the policies of trustee and employee organizations limit the extent to which school systems can implement a form of decentralized school budgeting?

2.3 How do the various collective agreements between school boards and employees limit the extent to which school systems can implement a form of decentralized school budgeting?

The nature of the political-legal framework is defined in the sub-problems for the study. The provincial statutes and regulations which affect public education in Alberta were examined along with the policies of the two organizations recognized in provincial legislation as representing the interests of trustees and teachers; namely, the Alberta School Trustees' Association and The Alberta Teachers' Association. Representatives of the Department of Education, the ASTA, and the ATA provided supplementary information.

The criterion for inclusion in this analysis was the identification of legislation, regulations, and policies which restricted or tended to restrict the extent to which authority to make budget decisions can be delegated to the school level. This approach is consistent with the definition of constraints upon decentralization provided by Holdaway (1974:47).

PROVINCIAL STATUTES AND REGULATIONS

Section 93 of the *British North America Act* granted to each Canadian province the right to ". . . exclusively make laws in relation to education . . . ." *The Department of Education Act* assigns the responsibility for educational matters in Alberta to a department of the public service under the administration of the Minister of Education, while *The School Act* contains legislation pertaining to the operation of school systems in the province. Regulations are established under *The Department of Education Act* and *The School Act*.

Administration of School Systems

Section 65 of *The School Act* makes clear that the board of trustees is responsible for the administration of a school system. It requires that the board shall ". . . maintain, repair, furnish and keep in good order all of its real and personal property," and further ". . . make rules for the administration, management and operation of schools . . . ." Although the same section grants the board the right to delegate any of its powers to the superintendent or a committee, it is apparent that responsibility for the administration of schools resides with the board and that decisions made at a lower level may be subject to the review of the board. Section 26 of *The County Act* indicates that the school committee in a county has, with certain exceptions not applicable to this analysis, the same responsibilities as a board of a district or division under *The School Act*.

Financial Constraints

School Foundation Program Fund. An ultimate constraint on the amount of money included in decentralized budgets is established by limits placed on school system funding, the major portion of which is provided by the provincial government in the School Foundation Program Fund established under Section 129 of *The School Act*. Regulations for this fund are revised annually to indicate the level of support for the various components of the fund. Boards may raise additional money at the municipal level but the amount of such requisitions is limited in regulations made by the Minister under Section 119 of *The School Act*. The effect of these constraints is to limit the amount of money available to schools.

School Grants Regulations. The Minister disburses a number of grants under the provisions of the School Grants Regulations of *The Department of Education Act*. For 1977, these included the Learning Disabilities Fund, Educational Opportunities Fund, Early Childhood Services, Small School Assistance Grant, and Declining Enrolment Grant. Section 8 of these regulations provides that, except by agreement with the Minister, these may be used ". . . only for those purposes for which application for the grant was made . . . ." The regulations imply that boards must establish controls where decisions are made at the school level on the disbursement of these funds.

Reporting to the Minister

Section 70 of *The School Act* requires each board to give an annual accounting of its finances to the Minister. This takes the form of an audited statement submitted on or before February 28 for the period January 1 to December 31 in the previous year. Regulations under the Act also require each board to provide the Minister with a statement of its estimates of revenues and expenditures. This takes the form of a statement submitted on or before March 28 (or later, if approved by the Minister), for the period January 1 to December 31 of that year. Standard forms are provided for reporting purposes. These requirements oblige the board to establish appropriate control procedures where a form of decentralized school budgeting has been implemented.

Program Accounting and Budgeting. A standardized financial accounting system known as Program Accounting and Budgeting (PAB) is required of all school systems in reporting to the Minister. PAB was introduced in Alberta as part of a project in Planning Programming Budgeting Evaluating Systems (PPBES) undertaken by the Department of Education. PAB was regarded as a financial sub-system of PPBES. PAB was piloted in ten school systems in 1971, was adopted on a voluntary basis in 1973, and became compulsory for all systems on January 1, 1974. Implementation of the more comprehensive PPBES was left as a local option. The Financial Information System (FIS) used in the financial management of counties in Alberta is compatible with PAB. Details of PAB and FIS are contained, respectively, in a Classification and Coding Manual (Alberta, Department of Education, 1975) and an Operations Manual (Alberta, Department of Municipal Affairs, 1973).

Monitoring by department. School system financial reports are monitored by Field Administrative Officers of the Department of Education to ensure that the various statutory and regulatory requirements are observed.

Decisions Related to Personnel

The School Act and regulations under *The Department of Education Act* constrain budget decisions affecting staff. Section 65 of the former indicates that *The Alberta Labour Act* applies to board, teachers, and other employees. This requirement is spelled out in respect to teachers in Section 74 of *The School Act* which indicates that the terms and conditions of collective agreements negotiated between the board and the organization representing teachers must be observed except for administrators excluded by negotiation. This legislation has the effect of constraining the delegation of budget decisions which may relate to the salaries of teachers and other employees whose salaries are determined by collective agreement. A further constraint on staffing decisions is established by the regulations under *The Department of Education Act* which set out the minimum certification requirements for teachers employed at various levels including early childhood.

Decisions Related to Curriculum

Section 12(2) of *The School Act* provides that the Minister may prescribe: (1) courses of study or pupil programs, or both, and (2) instructional materials. The same section indicates that the Minister may approve any course of study or pupil program submitted to him by a board. Section 13 allows the Minister to delegate all or any of his powers or duties under Section 12 to a board, with or without restrictions. The Minister has delegated his powers related to instructional materials.

The curriculum provisions of Section 12 of *The School Act* serve as a constraint on the extent to which schools may make budget decisions with respect to programs and materials. These must be consistent with curriculum guidelines established by the Department and, for instructional materials and programs approved by the Minister, guidelines approved by the board.

Decisions Related to Capital Outlay

Decisions at the school level in respect to capital outlay are constrained by the requirement of Section 92 of *The School Act* which indicates that "no board shall purchase, construct, alter, add to or renovate a school building except in accordance with regulations . . . under *The School Buildings Act* . . . ." Section 115 of *The School Act* provides a further constraint by indicating that money acquired or accumulated for capital expenditure cannot be used for another purpose except for a temporary transfer for one year or unless the approval of the Minister for alternative use is obtained.

ALBERTA SCHOOL TRUSTEES' ASSOCIATION

The Alberta School Trustees' Association was recognized in provincial legislation under *The Alberta School Trustees' Association Act* passed in 1939. The objects set out in Section 3 of the Act include the achievement of:

(i) the economical and efficient administration of the affairs of school districts and school divisions, and

(ii) the economical and efficient performance of all duties undertaken or imposed on school districts or school divisions.

This purpose may be regarded as a base value underlying any position the Association may take on budgeting practice.

A review of policy (Alberta School Trustees' Association, 1976) found no statement which directly or indirectly served or would tend to serve as a constraint on decentralized school budgeting. The Executive Director of the Association confirmed this assessment.

THE ALBERTA TEACHERS' ASSOCIATION

The Alberta Teachers' Association is recognized in provincial legislation under *The Teaching Profession Act*. Section 5 of the Act provides that "the employment of a teacher by a school board, other than as a superintendent, is conditional upon the teacher being and continuing to be an active member of the Association."

A review of policy (The Alberta Teachers' Association, 1976) revealed a number of statements which served as constraints on the employment of teachers' aides in schools. The Current Specific Policy of the Association (The Alberta Teachers' Association, 1976:165) states that:

> 14.A.1 BE IT RESOLVED, that The Alberta Teachers' Association advocate that teachers determine the number and type and function of teachers' aides to be employed in schools.
>
> 14.A.5 BE IT RESOLVED, that the Association oppose the employment of teachers' aides when such employment may effect a reduction of certificated staff.

Policy 14.A.1 is consistent with the concept of decentralization but may serve as a constraint on a principal acting without the consent of teachers. Policy 14.A.5 has implications for the exchange of teachers for teachers' aides but a spokesman for the Association indicated that no concerns have been expressed at the provincial level. Only if policies are violated or if the teacher-pupil ratio is adversely affected would this become an issue.

No other statements were found which served or would tend to serve as a constraint on decentralized school budgeting. Several statements, exemplified by Long Range Policy 10.7, explicitly promote the underlying concept:

> As the professional educators most directly responsible for the consequences of educational decisions teachers must be consulted regarding decisions related to educational policy and allocation of educational resources through direct involvement in the decision-making process.

One aspect of ATA policy which complements the provisions of *The School Act* is contained in the Code of Ethics of the organization. The Code stipulates that "the teacher adheres to collective agreements negotiated by his professional organization." Violation of the Code is deemed to be unprofessional conduct and may lead to disciplinary charges. Violation of policy is also considered to be unprofessional.

A spokesperson for the ATA indicated that the Association had not been called upon to take a position at the provincial level in respect to decentralized school budgeting. The Edmonton Public Local, however, was monitoring the school-based budget pilot project in the Edmonton Public System. Details of the monitoring process are contained in Chapter 12.

Collective Agreements

The spokesperson for the ATA indicated that decentralized school budgeting and its consequences had not been an issue in collective bargaining and could recall no collective agreement which limited the extent to which authority to make budget decisions may be delegated to the school.

Copies of collective agreements for each of the seven systems included in the second stage of the study were examined. No constraints on decentralized school budgeting were located in these documents.

No review was undertaken on a province-wide basis of collective agreements involving employees other than teachers. A decision was made to examine local contracts only when information provided in interviews in the second stage indicated that decentralized school budgeting or its consequences had been an issue in collective bargaining. One such instance identified in the Edmonton Public system is discussed in Chapter 12.

II. A SURVEY OF ALL SCHOOL SYSTEMS

The primary focus of the first stage of the study was a questionnaire survey of all Alberta school systems in response to the following problem and associated sub-problems:

1. How do school systems vary in the extent to which budget decisions have been decentralized to the school level?

1.1 To what extent do differences occur between the various types of school systems in respect to the degree of decentralization of budget decisions?

1.2 What is the relationship between student enrolment and the degree of decentralization of budget decisions?

1.3 What is the relationship between the number of schools in a system and the degree of decentralization of budget decisions?

1.4 What is the relationship between the dispersion of a school system and the degree of decentralization of budget decisions?

1.5 Which school systems have implemented decentralized school budgeting?

Rate of Return

Usable returns were received from 131 of the 138 school systems in the province, representing a rate of ninety-five percent. The rate of return from each type of system is shown in Table 6, with Consolidated and Regional School Districts considered as Public School Districts in the classification of systems.

Use of Descriptive Statistics

Tests to determine the statistical significance of differences were not employed in the analysis of responses since no generalizations from a sample to a population were required. Differences revealed among

Table 6

Rate of Response for Mail Questionnaire

Type of School System	Number	Usable Returns Number	Usable Returns Rate (%)
School Divisions	30	28	93
Counties	30	29	97
Public School Districts[a]	34	30[b]	88
Separate School Districts	44	44	100
Total	138	131	95[c]

[a] Consolidated and Regional School Districts were considered to be Public School Districts in this classification.

[b] Two unusable returns were also received.

[c] The total of all returns, usable and unusable, was 133, representing a rate of 96 percent.

the ninety-five percent of systems for which data were obtained were considered to be indicative of differences among the population of systems. The notion of "important" or "practical" significance was employed rather than that of "statistical" significance.

Characteristics of School Systems

Table 7 provides a comparison of the different types of school systems in Alberta using information provided in Section A of the questionnaire. The variables considered are the number of pupils, number of schools, number of central office personnel, area of system, dispersion, and size of 1976 budget. Three measures of dispersion were used: (1) number of pupils per square mile, (2) number of square miles per school, and (3) distance in miles from central office to the furthest school. The number of central office personnel indicates the number of persons in central office holding administrative, supervisory or consultative positions. Brief descriptions of each type of system are set out below.

School Districts.

The school district is the basic unit of school administration in the province. *The School Act* provides that a religious minority, Protestant or Roman Catholic, may establish a separate school district with a board having the same rights and obligations as the board of the public (majority faith) district.

School districts are generally located within cities, towns, and villages and have a relatively high concentration of pupils and schools. The frequency distributions of the number of pupils and number of schools are positively skewed with the means of these variables raised

Table 7

Selected School System Characteristics

Characteristic	Divisions (n=28)		Counties (n=29)		Public Districts (n=30)		Separate Districts (n=44)		Total (N=131)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Number of pupils	2,343	1,224	2,965	2,399	6,618	19,413	1,762	5,551	3,265	9,969
Number of schools	10.6	5.3	11.7	5.1	15.2	42.8	5.3	14.9	10.1	22.6
Number of central office personnel	3.2	1.4	3.1	2.7	7.4	18.0	5.0	14.6	4.8	12.1
Area in square miles	4,948	10,381	1,691	670	78	179	21	26	1,345	4,915
Dispersion										
Pupils per square mile	4.9	11.1	2.5	4.1	182.5	179.8	61.3	102.8	66.1	125.9
Square miles per school	482.9	1034.0	159.8	84.8	58.7	180.6	11.8	7.8	145.6	492.4
Miles from furthest school	65.9	74.1	41.7	18.6	3.9	8.9	12.6	37.6	28.7	47.5
Size of 1976 budget ($,000)	3,903	2,037	4,547	3,330	12,622	32,861	2,690	8.737	5,635	16,867

substantially by the systems in Edmonton and Calgary. If these systems are deleted, the mean number of pupils falls to 1,559 for Public Districts and 553 for Separate Districts. The mean distance from central office to the furthest school is higher for Separate Districts because thirty-four of the forty-four systems are administered by ten superintendents each of whom operates from a central office.

Section 24 of *The School Act* provides that two or more boards may enter into an agreement to establish a Regional District to provide services not otherwise available. Three such districts have been formed. Consolidated School Districts were formed by the consolidation of several school districts into larger units. There is no longer provision for the creation of Consolidated Districts and only three remain in the province.

School Divisions. School Divisions were first formed in 1936 when legislation was passed permitting the Minister to establish a new unit consisting of any number of public school districts. Several thousand districts were dissolved in this manner. There were thirty School Divisions in 1976. School Divisions have the highest area and dispersion of any kind of system in the province.

Counties. *The County Act* of 1950 provided for the amalgamation of municipal and school units of administration in rural areas. There were thirty Counties in 1976. The council of each county appoints separate committees to be responsible for the municipal and educational aspects of its operations with the school committee generally having all the rights and responsibilities of the school board.

DECENTRALIZATION IN DIFFERENT TYPES OF SCHOOL SYSTEMS

This section responds to sub-problem 1.1 by investigating the extent to which differences occur between the various types of school systems with respect to the degree of decentralization of budget decisions. These comparisons are made on scales developed for School Budget Authority (Section B of the questionnaire) and Operational Flexibility (Section C of the questionnaire). Consideration is also given to the extent to which schools may carry forward a surplus or a deficit (Section D of the questionnaire).

School Budget Authority

Table 8 summarizes the responses in Section B of the questionnaire which focused on the distribution of authority between central office and the school prior to consideration of budgets by the board. The table contains the percentage distribution of responses for each of the twenty-seven budget items included in the School Budget Authority Scale.

Nie, *et al*. (1975:230) provided two guidelines for the selection of a measure of association. It should be: (1) consistent with the level of measurement existing in the variables, and (2) interpretable in terms of probability or proportional reduction of error. Lambda was selected to provide a measure of association because it satisfied these criteria for nominal-level data.

Nie, *et al*. (1975:225) described the use of asymmetric lambda in the following terms:

> Asymmetric lambda measures the percentage of improvement in our ability to predict the value of the dependent variable once we know the value of the independent variable. This is based

Table 8

Percentage Distribution of Responses by Type of System on School Budget Authority Scale

School Budget Item	Percentage Distribution of Responses[a]															Measure of Association lambda[b]
	Divisions (n=28)			Counties (n=29)			Public Districts (n=30)			Separate Districts (n=44)			Total (N=131)			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
Certificated Staff																
Number of administrators	50	50	0	55	45	0	53	43	3	67	30	2	58	41	2	0.00
Number of classroom teachers	11	89	0	21	79	0	35	62	3	27	73	0	24	75	1	0.00
Number of counsellors, teacher-librarians	20	76	4	17	83	0	31	59	10	28	72	0	25	72	3	0.00
Use of substitute teachers	0	21	79	0	24	76	13	27	60	14	30	57	7	26	66	0.00
Non-Certificated Staff																
Number of teachers' aides	11	86	4	26	67	7	25	68	7	32	66	2	24	71	5	0.00
Number of secretaries	11	79	11	24	76	0	24	69	7	25	73	2	22	74	5	0.00
Number of caretakers	48	41	11	59	41	0	66	31	3	68	32	0	61	36	3	0.00
Overtime work by caretakers for school activities	30	48	22	35	31	35	49	30	11	64	25	11	49	32	19	0.08

[a] Type of budget decision: (1) central office decision: no school participation; (2) central office decision: school participation; (3) school decision: central office confirms.

[b] Asymmetric lambda, with type of budget decision as dependent variable.

Underlined entry indicates decision typically decentralized; that is, school decision made by at least fifty percent of systems.

Table 8 (Continued)

School Budget Item	Percentage Distribution of Responses[a]															Measure of Association lambda[b]
	Divisions (n=28)			Counties (n=29)			Public Districts (n=30)			Separate Districts (n=44)			Total (N=131)			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
Services Purchased																
Use of external consultants by school	21	43	36	3	59	38	14	61	25	32	41	27	19	50	31	0.00
Postage	7	29	64	11	0	89	20	7	73	11	32	57	12	19	69	0.00
Travel and subsistence for staff on school business	39	39	21	35	41	24	37	40	23	21	48	32	31	43	26	0.00
Transportation for students on field trips	14	50	36	10	31	59	3	40	57	7	43	50	8	41	50	0.06
Maintenance and repair of buildings	29	68	4	14	86	0	37	57	7	41	57	2	31	66	3	0.00
Maintenance and repair of equipment	7	78	15	3	55	41	14	59	27	21	59	21	12	62	26	0.00
Rental of facilities for school activities	8	39	54	0	39	61	19	37	44	43	31	26	20	36	44	0.10
Enrolment fees for staff attending in-service activities	29	57	14	17	45	38	33	37	30	25	50	25	26	47	27	0.00
Registration fees for staff attending conferences	32	57	11	14	52	35	37	30	33	27	48	25	28	47	26	0.03

[a] Type of budget decision: (1) central office decision: no school participation; (2) central office decision: school participation; (3) school decision: central office confirms.

[b] Asymmetric lambda, with type of budget decision as dependent variable.

[c] Underlined entry indicates decision typically decentralized; that is, school decision made by at least fifty percent of systems.

Table 8 (Continued)

School Budget Item	Percentage Distribution of Responses[a]															Measure of Association lambda[b]
	Divisions (n=28)			Counties (n=29)			Public Districts (n=30)			Separate Districts (n=44)			Total (N=131)			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
Printing of school newsletter	4	7	89	0	0	100	4	7	89	2	16	81	2	9	89	0.00
Advertising in local newspaper	21	39	39	28	28	45	31	24	45	36	33	31	30	31	39	0.03
Supplies																
Purchase of instructional materials	7	32	61	0	31	69	0	20	80	5	41	55	3	32	65	0.00
Purchase of textbooks for rental by students	4	43	54	0	52	48	0	10	90	5	27	68	2	32	66	0.02
Purchase of library books	4	25	71	0	24	76	0	10	90	2	25	73	2	21	77	0.00
Purchase of audio-visual materials	4	39	57	0	35	66	0	27	73	2	42	57	2	36	63	0.00
Capital Outlay																
Improvements to school grounds	7	75	18	7	90	3	31	66	3	25	68	7	19	74	8	0.00
Structural alterations to buildings	21	71	7	21	79	0	31	69	0	30	68	2	26	72	2	0.00
Purchase of equipment	11	57	32	3	66	31	10	72	17	9	80	11	9	70	22	0.00
Purchase of furniture	11	68	21	3	72	24	10	72	17	14	75	11	10	72	18	0.00

[a] Type of budget decision: (1) central office decision: no school participation; (2) central office decision: school participation; (3) school decision: central office confirms.

[b] Asymmetric lambda, with type of budget decision as dependent variable.

[c] Underlined entry indicates decision typically decentralized; that is, school decision made by at least fifty percent of systems.

> on the assumption that the best strategy for prediction is to select the category with most cases (modal category), since this will minimize the number of wrong guesses.

The maximum value of lambda is 1.0, when predictions can be made without error, while the minimum value is 0.0, meaning that there is no improvement in prediction with knowledge of the independent variable. The values of asymmetric lambda in Table 8 were calculated using the type of budget decision as the dependent variable and the type of system as the independent variable.

The following are the features of the distribution of authority in the different systems indicated by the responses summarized in Table 8:

1. If all systems for which data were obtained are considered, budget decisions were typically decentralized for only eight of the twenty-seven items in the Scale. A decision was considered "typically decentralized" when a school decision was made for the allocation in at least fifty percent of the systems. Those typically decentralized were the use of substitute teachers, postage, transportation for students on field trips, printing of school newsletters, purchase of instructional supplies, textbooks for rental by students, library books, and audio-visual materials.

2. The measure of association given by lambda suggests that there is little or no relationship between the type of system and the type of decision made for each budget item. The value of lambda was 0.0 for twenty-one of the twenty-seven items indicating that there is no improvement in predicting the type of budget decision with knowledge of the type of system. This means that the modal category for the type of

budget decision was the same for each type of system for each of these twenty-one items. The value of lambda for the other six items varied from 0.02 to 0.10, meaning that, at most, knowledge of the type of school system increases ability to predict the type of budget decision by ten percent.

3. Table 9 summarizes the items in the scale which were typically decentralized for each type of system under consideration. Those typically decentralized in each of the four systems were those concerned with the use of substitute teachers, postage, printing of school newsletters, and purchases of instructional supplies, library books, and audio-visual materials. Budget decisions were typically decentralized for the transportation of students on field trips in all types of systems except Divisions, for rental of facilities for school activities in Division and Counties only, and for purchase of textbooks for rental by students in all types except Counties.

4. The degree of decentralization for each school system using the criterion of School Budget Authority was determined by calculating the total number of budget items for which a school decision on allocation was made. The means of these totals for each type of system are given in Table 10.

A comparison of means indicates that Counties have the highest degree of decentralization on this Scale with a mean of 9.5 items compared to 8.3, 9.1, and 7.3 for Divisions, Public Districts and Separate Districts respectively.

Table 9

Typically Decentralized Budget Items on School Budget Authority Scale[a]

School Budget Item	Divisions	Counties	Public Districts	Separate Districts	Total
Use of substitute teachers	Yes	Yes	Yes	Yes	Yes
Postage	Yes	Yes	Yes	Yes	Yes
Transportation for students on field trips	No	Yes	Yes	Yes	Yes
Rental of facilities for school activities	Yes	Yes	No	No	No
Printing of school newsletter	Yes	Yes	Yes	Yes	Yes
Purchase of instructional supplies	Yes	Yes	Yes	Yes	Yes
Purchase of textbooks for rental by students	Yes	No	Yes	Yes	Yes
Purchase of library books	Yes	Yes	Yes	Yes	Yes
Purchase of audio-visual materials	Yes	Yes	Yes	Yes	Yes

[a] Yes: Indicates typically decentralized; that is, school decision made in at least fifty percent of systems.

No: Indicates typically centralized; that is, central office decision made in at least fifty percent of systems.

Table 10

Degree of Decentralization by Type of System on School Budget Authority Scale

Type of System	Number	Mean[a]	SD	Range Minimum	Range Maximum
Divisions	28	8.3	4.8	1	18
Counties	29	9.5	4.6	1	17
Public Districts	30	9.1	4.7	0	21
Separate Districts	44	7.3	4.3	0	17
Total	131	8.4	4.6	0	21

[a] Mean number of decisions on scale for which a school decision on budget item is made.

Operational Flexibility

Table 11 summarizes the responses in Section C of the questionnaire which focused on the extent to which schools have discretion to reallocate within and between budget categories following adoption of the system budget by the board. The table contains the percentage distribution of responses for each of the twenty-five types of transfers included in the Operational Flexibility Scale. Lambda provides a measure of association between the type of system and the type of discretion. The following summarizes the features of the distribution:

1. If all systems for which data were obtained are considered, at least moderate discretion was typically allowed for nine of the twenty-five transfers listed in the Scale. A high degree of discretion was allowed for only one of the twenty-five. The criterion of "typical" was

Table 11

Percentage Distribution of Responses by Type of System on Operational Flexibility Scale

Budget Transfer	Percentage Distribution of Responses[a]															Measure of Association lambda[b]
	Divisions (n=28)			Counties (n=29)			Public Districts (n=30)			Separate Districts (n=44)			Total (N=131)			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
From Certificated Staff to:																
Certificated staff	56	32	12	72	21	7	35	35	31	41	39	21	50	32	18	0.00
Non-certificated staff	63	30	7	69	31	0	66	28	7	66	23	11	66	27	7	0.00
Services purchased	67	15	19	76	24	0	69	28	3	64	32	5	68	26	6	0.00
Supplies	67	11	22	72	24	3	76	21	3	66	25	9	70	21	9	0.00
Capital outlay	74	19	7	83	17	0	75	18	7	73	11	16	76	16	9	0.00
From Non-certificated Staff to:																
Certificated staff	76	24	0	76	24	0	79	21	0	68	32	0	74	26	0	0.00
Non-certificated staff	52	32	16	57	32	11	42	31	27	41	54	5	48	39	14	0.08
Services purchased	73	19	8	66	31	3	72	21	7	59	36	5	66	28	6	0.00
Supplies	77	23	0	69	24	7	76	21	3	57	36	7	68	27	5	0.00
Capital outlay	89	12	0	76	21	3	82	14	4	64	30	7	76	21	4	0.00

[a] School Operational Flexibility: (1) Indicates no discretion to transfer; (2) Indicates moderate discretion; (3) Indicates high discretion.

[b] Asymmetric lambda with School Operational Flexibility as the dependent variable.

Underlined entry indicates this type of system typically allows (allowed by at least fifty percent of systems) at least a moderate degree of discretion.

Underlined entry indicates this type of system typically allows (allowed by at least fifty percent of systems) a high degree of discretion.

Table 11 (Continued)

Budget Transfer	Divisions (n=28)			Counties (n=29)			Public Districts (n=30)			Separate Districts (n=44)			Total (N=131)			Measure of Association lambda[b]
	Percentage Distribution of Responses[a]															
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
From Services Purchased to:																
Certificated staff	78	22	0	86	14	0	83	14	3	66	21	14	77	18	6	0.00
Non-certificated staff	70	30	0	79	18	4	69	21	10	57	32	11	67	26	7	0.00
Services purchased	32	24	44	36	39	25	19	42	39	13	49	39	24	40	36	0.07
Supplies	44	44	11	54	39	7	45	35	21	41	30	30	45	36	19	0.00
Capital outlay	78	22	0	64	29	7	71	18	11	52	27	21	65	24	11	0.00
From Supplies to:																
Certificated staff	74	22	4	76	17	7	79	21	0	66	32	2	73	24	3	0.00
Non-certificated staff	74	19	7	72	21	7	72	24	3	66	27	7	71	23	6	0.00
Services purchased	44	41	15	32	61	7	38	38	24	23	43	34	33	45	22	0.01
Supplies	21	25	54	19	39	42	15	37	48	5	40	55	14	36	50	0.00
Capital outlay	56	37	7	45	45	10	61	25	14	46	21	34	51	31	19	0.00

[a] School Operational Flexibility: (1) Indicates no discretion to transfer; (2) Indicates moderate discretion; (3) Indicates high discretion.

[b] Asymmetric lambda with School Operational Flexibility as the dependent variable.

Underlined entry indicates this type of system typically allows (allowed by at least fifty percent of systems) at least a moderate degree of discretion.

Underlined entry indicates this type of system typically allows (allowed by at least fifty percent of systems) a high degree of discretion.

Table 11 (Continued)

Budget Transfer	Percentage Distribution of Responses[a]															Measure of Association lambda[b]
	Divisions (n=28)			Counties (n=29)			Public Districts (n=30)			Separate Districts (n=44)			Total (N=131)			
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
From Capital Outlay to:																
Certificated staff	89	11	0	83	14	3	89	7	3	73	16	11	82	13	6	0.00
Non-certificated staff	89	11	0	83	14	3	82	7	11	68	18	14	79	13	8	0.00
Services purchased	70	26	4	55	41	3	68	18	14	41	34	25	56	31	13	0.00
Supplies	44	48	7	55	38	7	64	21	14	30	52	18	46	41	13	0.16
Capital outlay	42	33	25	37	41	22	48	28	24	37	26	37	40	32	28	0.02

[a] School Operational Flexibility: (1) Indicates no discretion to transfer; (2) Indicates moderate discretion; (3) Indicates high discretion.

[b] Asymmetric lambda with School Operational Flexibility as the dependent variable.

Underlined entry indicates this type of system typically allows (allowed by at least fifty percent of systems) at least moderate degree of discretion.

Underlined entry indicates this type of system typically allows (allowed by at least fifty percent of systems) a high degree of discretion.

that discretion was allowed by at least fifty percent of the systems.

If transfers within a given category are not considered (for example, a transfer from one item in the supplies category to another item in the supplies category), at least moderate discretion was typically allowed for only four kinds of transfers: from services to supplies, from supplies to services, from supplies to capital outlay, and from capital outlay to supplies. A high degree of discretion was not typically allowed for any transfer under these circumstances.

2. The measure of association given by lambda suggests that there is little or no relationship between the type of system and the type of discretion allowed for each transfer listed in the Scale. The value of lambda was 0.00 for twenty of the twenty-five transfers indicating that there is no improvement in predicting the type of discretion with knowledge of the type of system. This means that the modal category for the type of discretion is the same for each type of system for each of these twenty-five transfers. The value of lambda for the other five transfers varies from 0.01 to 0.16, meaning that, at most, knowledge of the type of school system increases the ability to predict the type of discretion by sixteen percent.

3. Table 12 summarizes the kinds of transfers for which at least moderate discretion was typically allowed for each type of system under consideration. A difference in the extent of decentralization is revealed among the systems using this criterion. The number of transfers for which at least moderate discretion was typically allowed was ten for Separate Districts, seven for Public Districts, six for Divisions, and five for Counties. A high degree of discretion was typically allowed for

Table 12

Transfers for Which Systems Typically Allow at Least Moderate Discretion[a]

Budget Transfer						
From	To	Divisions	Counties	Public Districts	Separate Districts	Total
Certificated staff	Certificated staff	No	No	Yes	Yes	Yes
Non-certificated staff	Non-certificated staff	No	No	Yes	Yes	Yes
Services purchased	Services purchased	Yes	Yes	Yes	Yes	Yes
	Supplies	Yes	No	Yes	Yes	Yes
Supplies	Services purchased	Yes	Yes	Yes	Yes	Yes
	Supplies	Yes[b]	Yes	Yes	Yes[b]	Yes[b]
	Capital outlay	No	Yes	No	Yes	Yes
Capital outlay	Services purchased	No	No	No	Yes	No
	Supplies	Yes	No	No	Yes	Yes
	Capital outlay	Yes	Yes	Yes	Yes	Yes

[a] Yes: Indicates that this type of system typically allows (for more than fifty percent of systems) at least a moderate degree of discretion to make transfers.
No: Indicates that this type of system typically allows (for more than fifty percent of systems) no discretion to transfer.

[b] System typically allows (for more than fifty percent of systems) a high degree of discretion to make transfers.

transfers within the supplies category for Divisions and Separate Districts only.

4. The degree of decentralization for each school system using the criterion of Operational Flexibility was determined in two ways: (i) by calculating the total number of transfers for which at least moderate discretion was allowed, and (ii) by calculating the total number of transfers for which high discretion was allowed. The results are summarized in Table 13.

A comparison of mean scores in Table 13 indicates that Separate Districts have the highest degree of decentralization on this Scale. The mean scores for Separate Districts with respect to moderate discretion was 11.8 transfers compared to 8.4, 8.9, and 8.5 for Divisions, Counties, and Public Districts respectively. The mean score for Separate Districts with respect to high discretion was 4.2 transfers compared to 2.5, 1.8, and 3.0 for Divisions, Counties and Public Districts respectively. The distribution of scores for both measures was positively skewed.

Carrying a Surplus or Deficit

Table 14 summarizes the responses in Section D of the questionnaire which focused on the extent to which system policy provided for schools to carry an operating surplus or deficit to the following budget year. The table contains the percentage distribution of responses for each alternative provided. Lambda provides a measure of association between the type of system and the type of policy. The following summarizes the features of the distribution:

1. Policy permitting schools to carry forward an operating surplus

Table 13

Degree of Decentralization by Type of System on Operational Flexibility Scale

		At Least Moderate Discretion				High Discretion			
				Range				Range	
Type of System	Number	Mean[a]	SD	Minimum	Maximum	Mean[b]	SD	Minimum	Maximum
Divisions	28	8.4	6.8	0	24	2.5	2.2	0	6
Counties	29	8.9	7.3	0	25	1.8	3.6	0	18
Public Districts	30	8.5	7.3	0	25	3.0	4.6	0	21
Separate Districts	44	11.8	8.0	0	25	4.2	3.8	0	12
Total	131	9.7	7.5	0	25	3.0	3.8	0	21

[a] Mean number of transfers on Operational Flexibility Scale for which schools have at least moderate discretion.

[b] Mean number of transfers on Operational Flexibility Scale for which schools have high discretion.

Table 14

Percentage Distribution of Responses by Type of System for Carrying Forward a Surplus or Deficit[a]

Policy	Division (n=28)		Counties (n=29)		Public Districts (n=30)		Separate Districts (n=44)		Total (N=131)	
	Sur.	Def.	Sur.	Def.	Sur.	Def.	Sur.	Def.	Sur.	Def.
Not carried	54	61	38	41	50	62	61	72	52	61
Carried										
A limited amount for some items	14	7	24	17	13	14	26	21	20	16
The total amount for some items, limited or none for others	11	7	14	14	17	10	7	5	12	9
A limited amount for all items	7	7	3	3	3	0	2	0	4	2
The total amount for all items	14	18	21	24	17	14	5	2	13	13
Total	47	39	62	59	50	38	40	28	49	40

[a] Asymmetric lambda, with type of policy as dependent variable, is 0.11 for carrying a surplus and 0.10 for carrying a deficit.

or deficit in their budgets was reported for forty-nine percent and forty percent of systems, respectively.

2. Only for Counties did a majority of systems provide for the carrying of a surplus and a deficit (in sixty-two percent and fifty-nine percent of systems, respectively).

3. The measures of association given by lambda suggest that there is only a weak relationship between the type of system and type of policy. The values were 0.11 for carrying a surplus and 0.10 for carrying a deficit, indicating that knowledge of the type of school system increased the ability to predict the type of policy by eleven percent and ten percent, respectively.

School Budget Authority and Operational Flexibility

A measure of association between scores on the School Budget Authority Scale and the Operational Flexibility Scale was obtained for each type of system by calculating Spearman rank-order correlation coefficients (rho). This non-parametric statistic was chosen rather than the parametric product-moment coefficient because the assumptions underlying the use of the parametric measure were violated. The distribution of scores on the Operational Flexibility Scale was strongly skewed in the positive direction.

Mueller, Schuessler, and Costner (1970:271-274) demonstrated that the value of $(\text{rho})^2$ may be interpreted as a relative reduction in prediction error in a similar manner to that outlined above for lambda. This method of interpretation enabled the choice of rho to conform to the criteria suggested by Nie, *et al*. (1975:230), cited earlier in this chapter, for the selection of a measure of association.

The calculation of rho used in the analysis of data (Nie, et al., 1975:289) incorporated a correction for ties when the scores on the scales were converted to rankings.

Table 15 contains the Spearman coefficients for: (i) School Budget Authority and Operational Flexibility (with at least moderate discretion), and (ii) School Budget Authority and Operational Flexibility (with high discretion). The following summarizes the features of the table:

1. Seven of the ten coefficients (rho) lie between -0.20 and +0.20, indicating that, at most, knowledge of the ranking on one scale increases the ability to predict the ranking on the other scale by a maximum of four percent, that is, by $(\text{rho})^2$. Generally speaking, then, there is only a weak relationship between these variables.

2. A correlation coefficient of 0.61 was obtained for Counties for the relationship between School Budget Authority and Operational Flexibility (high discretion). This indicates a reduction in prediction error of thirty-seven percent. The relationship is weaker (rho = 0.33) in the same comparison for Public Districts.

3. Negative correlations of -0.27 and -0.17 were obtained for the relationships for Separate Districts. This weak inverse relationship is consistent with previous analysis which revealed that the mean score for Separate Districts was lowest on the School Budget Authority Scale and highest on each of the measures derived from the Operational Flexibility Scale.

Table 15

Relationship Between School Budget Authority and Operational Flexibility

	Spearman Correlation Coefficient (rho)	
Type of System	School Budget Authority and Discretion	School Budget Authority and High Discretion
Divisions	0.02	0.08
Counties	0.06	0.61
Public Districts	0.08	0.33
Separate Districts	-0.27	-0.17
Total	-0.06	0.11

Decentralization and Policy on Carrying

The mean scores on each measure derived from the School Budget Authority and Operational Flexibility Scales were calculated for each of two groups for each type of system: (1) systems with a policy which provided for carrying forward a surplus or a deficit, and (2) systems which did not provide for carrying forward a surplus or a deficit. Table 16 summarizes the mean scores on these scales for the different policies.

A slightly higher mean score on a decentralization scale was associated with a policy of carrying forward a surplus or a deficit in twenty-two of the thirty comparisons contained in Table 16.. The association was most consistent for School Budget Authority (eight of ten comparisons) and for Separate Districts (six of six comparisons). The association was least consistent for each of the measures of

Table 16

Mean Scores on Decentralization Scales for Different Policies on Carrying

		Surplus			Deficit		
Type of System	Policy	School Budget Authority	Discretion	High Discretion	School Budget Authority	Discretion	High Discretion
Divisions	Carry	8.3	7.9	2.2	9.3	6.0	1.6
	No carry	8.3	8.9	2.7	7.7	9.9	3.0
Counties	Carry	10.7	8.6	2.6	10.3	9.2	1.7
	No carry	7.6	9.3	0.6	8.4	8.3	2.1
Public Districts	Carry	9.9	10.1	4.4	9.1	11.7	5.2
	No carry	8.3	6.9	1.7	9.6	7.1	1.9
Separate Districts	Carry	8.6	13.1	5.7	9.4	14.3	6.8
	No carry	6.3	10.9	3.0	6.4	10.7	3.0
Total	Carry	9.4	10.0	3.8	9.6	10.3	3.6
	No carry	7.4	9.3	2.2	7.7	9.4	2.6

Operational Flexibility (seven of ten comparisons in each instance) and for Divisions (one of six comparisons).

DECENTRALIZATION AND SELECTED ORGANIZATIONAL CHARACTERISTICS

This section responds to sub-problems 1.2 to 1.4 by investigating the relationship between the degree of decentralization of budget decisions and the school system characteristics of: (1) the number of pupils, (2) the number of schools, and (3) the dispersion. Spearman rank-order correlation coefficients were calculated to provide a measure of the degree of association. As in the previous analyses in this chapter, this non-parametric statistic was chosen because the assumption of normality which underlies the use of the product-moment coefficient was violated. The distribution of measures for all variables except School Budget Authority was strongly skewed in the positive direction.

Table 17 contains the Spearman coefficients indicating the degree of association between each of the three measures of decentralization and each of the three organizational characteristics. The features of the table are summarized below.

Number of Pupils

Table 17 indicates that, for all types of systems, there is a low positive correlation between the degree of decentralization measured on the School Budget Authority Scale and the number of pupils in a system. A correlation coefficient of 0.22 was obtained for all systems taken together, indicating a reduction in prediction error of approximately five percent. Correlation coefficients varied from 0.06 for Counties to 0.36 for Public Districts.

Table 17

Relationship Between Degree of Decentralized School Budgeting and Selected Organizational Characteristics

Variables in Relationship		Spearman Correlation Coefficients (rho)				
Measure of Decentralization	Organizational Characteristics	Divisions	Counties	Public Districts	Separate Districts	Total
School Budget Authority	Number of Pupils	0.24	0.06	0.36	0.20	0.22
	Number of Schools	0.32	0.20	0.31	0.22	0.24
	Dispersion--Pupil	0.31	-0.07	0.23	-0.05	-0.04
	--School	-0.33	0.03	-0.12	0.12	0.08
	--Distance	-0.05	-0.01	0.14	-0.20	-0.01
Operational Flexibility						
(1) Discretion	Number of Pupils	0.19	-0.03	0.09	0.08	-0.07
	Number of Schools	0.17	-0.05	0.14	-0.02	-0.06
	Dispersion--Pupil	-0.23	-0.09	-0.01	0.17	0.03
	--School	0.28	0.04	0.12	-0.11	-0.02
	--Distance	0.17	0.06	0.16	0.06	0.04
(2) High Discretion	Number of Pupils	0.13	-0.04	-0.05	0.09	-0.16
	Number of Schools	0.23	-0.07	-0.07	0.01	-0.16
	Dispersion--Pupil	-0.04	-0.25	-0.04	0.08	0.05
	--School	0.04	0.31	0.19	0.00	-0.03
	--Distance	-0.02	-0.17	0.14	-0.01	-0.12

The correlation coefficient of -0.16, for all systems taken together, indicates a weak negative relationship between the degree of decentralization measured on the Operational Flexibility Scale (High Discretion) and the number of pupils in a system. The reduction in prediction error is approximately three percent. Correlation coefficients vary from -0.05 for Public Districts to 0.13 for Divisions There was an even weaker relationship (rho = -0.07) between the number of pupils and measures on the Operational Flexibility Scale (Discretion).

Number of Schools

The relationship indicated in Table 17 between the degree of decentralization and the number of schools in a system is very similar to that for the number of pupils. Correlation coefficients for all systems taken together were 0.24 with School Budget Authority, -0.16 with Operational Flexibility (High Discretion), and -0.06 with Operational Flexibility (Discretion).

Dispersion

The correlation coefficients in Table 17 indicate little relationship between the measures of dispersion and measures of decentralization. For all systems taken together, the nine coefficients are in the range from -0.12 to 0.08, indicating a maximum reduction in prediction error of approximately one percent. Stronger relationships appear for Divisions, where a coefficient of -0.33 was obtained for school dispersion and School Budget Authority, and +0.28 for school dispersion and Operational Flexibility (Discretion). For Counties, a coefficient of 0.31 was obtained for school dispersion and Operational Flexibility (High Discretion). There is no consistency, however, in the values of rho for the different types of system or measure.

IMPLEMENTATION OF DECENTRALIZED SCHOOL BUDGETING

Each superintendent was invited in Section E of the questionnaire to indicate if a form of decentralized school budgeting had been implemented in his system. Such a practice was described in the rubric of the question as the adoption of policies and procedures "which significantly increased the degree of budget authority located at the school level." Table 18 summarizes the responses to this item.

The value of lambda was 0.15, meaning that knowledge of the type of school system increases ability to predict implementation by fifteen percent. The responses indicate an important difference among the systems. Approximately eighty percent of Division and County superintendents perceived their systems to be decentralized compared to approximately fifty-five percent of superintendents in Public and Separate Districts.

Except for superintendents of Public Districts, the responses of superintendents who perceived a form of decentralized school budgeting were evenly divided between implementation in the whole system or part of the system. Most Public Districts with a form of the practice have introduced it for the whole system. Additional comments by two superintendents included the phrase "part of the budget" rather than "part of the system," thus suggesting that this aspect of the item may have been the subject of varying interpretations.

Year of Implementation

Table 19 indicates the year of implementation of decentralized school budgeting in systems where the practice was perceived to have been adopted. Except for Public Districts, the majority of superintendents

Table 18

Implementation of Decentralized School Budgeting: Percentage Distribution of Superintendents' Perceptions[a]

Type of System	No	Yes Part of System	 Whole System
Divisions (n=27)	22	41	37
Counties (n=29)	21	35	45
Public Districts (n=30)	47	13	40
Separate Districts (n=44)	48	30	23
Total (N=130)	36	29	35

[a] Asymmetric lambda, with implementation as dependent variable, has a value of 0.15.

Table 19

Year of Implementation of Decentralized School Budgeting

Type of System	Percentage Distribution of Responses[a] 1976	 1975	 1974	 1973	 Before 1973
Divisions (n=20)	0	10	15	10	65
Counties (n=24)	13	4	21	4	58
Public Districts (n=15)	13	13	20	13	40
Separate Districts (n=23)	13	4	0	13	70
Total (N=82)	10	7	13	10	60

[a] Asymmetric lambda, with year of implementation as the dependent variable, has a value of 0.00.

in each type of system reported that the practice was implemented before 1973. The value of lambda suggests that there is generally no important difference between the type of system and the year of implementation. The value of 0.00 indicates that there is no improvement in predicting the year of implementation with knowledge of the type of system.

Consideration by Systems Not Implementing the Practice

Superintendents who did not perceive a form of decentralized school budgeting in their systems were asked to indicate the extent to which the practice had been considered. Table 20 contains a summary of responses. A majority of superintendents (sixty-six percent) reported that no consideration had been given to the matter, while sixteen percent indicated that it had been considered but rejected. The practice was under consideration or was planned in eighteen percent of the systems. Lambda has a value of 0.00, suggesting that there is no relationship between the type of system and the nature of the consideration given to the practice.

Statements of Policy and Procedure

Superintendents were requested in Section F of the questionnaire to provide copies of policy and procedure to help the researcher gain an understanding of the process used in the development of school budgets. Additional comments were invited in each of the other sections of the questionnaire. The major features of the information provided in this manner are summarized below.

Table 20

Consideration by Systems Not Implementing Decentralized School Budgeting

	Percentage Distribution of Responses[a]				
Nature of Consideration	Divisions (n=6)	Counties (n=4)	Public Districts (n=14)	Separate Districts (n=14)	Total (N=38)
Not considered	50	50	71	71	66
Considered but rejected	50	25	14	0	16
Currently under consideration	0	0	7	29	13
Considered and will be implemented on a pilot basis before a decision on system-wide is made	0	0	7	0	3
Considered and will be implemented on a system-wide basis	0	25	0	0	3

[a] Asymmetric lambda, with nature of consideration as dependent variable, has a value of 0.00.

Systems providing statements. The majority of superintendents in each type of system provided supplementary information, either in the form of elaborative remarks in the questionnaire or the enclosure of statements of policy and procedure. Thirty superintendents provided copies of official statements of policy related to school involvement in the budgeting process. Table 21 contains details for the different types of systems. The responses suggest that a higher proportion of County systems have such statements. The procedures described in the various elaborative remarks and official statements were generally consistent with the patterns of responses in the questionnaires.

Table 21

Systems Providing Statements of Policy and Procedure

Type of System	Number of Systems	Responding in Stage 1	Number Providing Official Statements
Divisions	30	28	6
Counties	30	29	15
Public Districts	34	30	5
Separate Districts	44	44	4
Total	138	131	30

Patterns of decentralization. Detailed analysis of policy and procedure is beyond the scope of this stage of the study. In general terms, however, these provided details of procedures used in the preparation and administration of budgets. The major differences lay in the preparation phase with two general patterns of decentralization apparent:

(i) The provision of a lump-sum allocation to schools, often termed a mini-budget, for expenditure in one or more of the services purchased, supplies, and capital outlay categories of the budget. Schools were required, in many instances, to submit a plan for the allocation of these funds. The lump-sum allocations were usually determined on a per pupil basis, although one system allocated nine percent of the School Foundation Program Grant for this purpose.

(ii) Preparation at the school level of a statement of needs and associated costs in one or more budget categories. Schools were provided with guidelines to assist in this task. These statements were submitted to or discussed with the Superintendent prior to consideration by the Board.

Superintendents administering more than one system. Persons serving as superintendent of more than one system indicated in several instances that similar budget procedures were employed in each system under their jurisdiction. An analysis of these comments, and of the questionnaire responses in the School Budget Authority and Operational Flexibility Scales, indicated that this was a general pattern for ten of the fifteen superintendents administering more than one system.

Identical patterns of school involvement were revealed within the jurisdictions of five superintendents representing a total of twenty systems, while very similar patterns were revealed for five other superintendents representing twenty-one systems. Budget practice differed substantially in the ten systems administered by the other five superintendents.

Most of the sets of systems described above consisted of small, neighboring, rural, Separate Districts with one or two schools in each system. The analysis suggests that the administrative style of the superintendent may be an important factor in the pattern of school involvement.

III. SELECTION OF SYSTEMS FOR STAGE 2 OF THE STUDY

Systems with Decentralized School Budgeting

The first task in selecting systems for further study was the identification of those which had implemented decentralized school budgeting. This task also responded to sub-problem 1.5 in the problem statement for the study.

A school system was considered to have implemented a form of decentralized school budgeting if it scored at the seventy-fifth percentile or higher on either or both of the School Budget Authority Scale and the Operational Flexibility Scale. Using this criterion, systems were considered to be decentralized with respect to School Budget Authority if school decisions were made on allocations for eleven or more of the twenty-seven items in the scale (the top twenty-nine percent) and, with respect to Operational Flexibility, if schools had high discretion to make four or more transfers of the twenty-five listed in the Scale (the top twenty-six percent).

The distribution of systems with decentralized school budgeting is shown in Table 22. The distinctive features of the distribution, each of which is consistent with previous analysis, are:

Table 22

Distribution of Systems with Decentralized School Budgeting

		School Budget Authority		Operational Flexibility		Authority and Flexibility	
Type of System	Number	Number Decentralized	Percentage	Number Decentralized	Percentage	Number Decentralized	Percentage
Divisions	28	7	25	8	29	1	4
Counties	29	11	38	3	10	2	7
Public Districts	30	9	30	8	27	5	17
Separate Districts	44	11	25	15	34	3	7
Total	131	38	29	34	26	11	8

1. The proportion of Counties is larger than that for other systems on the School Budget Authority Scale and lower than that for other systems on the Operational Flexibility Scale.

2. The proportion of Separate Districts is larger than that for other systems on the Operational Flexibility Scale.

3. Only eleven of the sixty-one systems are decentralized on both scales. The proportion of Public Districts is larger than for other systems.

The names of the school systems with decentralized school budgeting, defined in the manner described above, are contained in Appendix D.

Criteria for Selection in Stage 2

The constraints of the research methodology limited further study to seven systems. A pilot project in Edmonton Public was included because it represented the highest degree of decentralization in any system in the province. The remaining six were selected according to the criteria set out below.

It was not necessary for the systems to be a random or stratified random sample since the case nature of the study limited the extent to which findings could be generalized. The criteria listed below permitted, however, the selection of six systems which differed on three characteristics related to the nature of the system and three related to budgeting practice. These were:

1. At least one of each of the systems described in provincial statutes: Divisions, Counties, Public Districts, Separate Districts, and Regional Districts.

2. At least one system from each of the pupil enrolment classifications: (i) less than 2,000, (ii) 2,000-4,999, (iii) 5,000-20,000, and (iv) more than 20,000.

3. At least one system which is predominantly rural, at least one which is predominantly urban, and at least one which is both urban and rural.

4. At least one system representing each type of decentralization, as indicated by scores in the top quartile on: (i) the School Budget Authority Scale, (ii) the Operational Flexibility Scale, and (iii) both School Budget Authority and Operational Flexibility Scales. All such systems are listed in Appendix D.

It was decided to select only one system having a high degree of decentralization on just the Operational Flexibility Scale. This decision reflected the restricted part of the budgeting process associated with operational flexibility.

5. At least one system with a policy for schools to carry forward an operating surplus and/or deficit, and at least one system with no policy of this kind.

6. At least one system which implemented the practice prior to 1973 and at least one which implemented it in 1975 or later. This selection facilitated the analysis of systems at different stages of the change process.

7. Many sets of six systems conformed to the criteria set out above. The final selection was made by choosing, as far as possible, those with the highest degree of decentralization on the different scales. Factors such as convenience of data collection were used in selecting two systems

which were similar in all other respects.

8. A system was selected for the piloting of interview schedules. This system, the County of Parkland, was of medium size, both urban and rural in nature, had experience with decentralized school budgeting over a number of years, and ranked sixth of all systems on the School Budget Authority Scale.

Selection

The characteristics of the six systems, apart from Edmonton Public, selected for further study are contained in Table 23, and with respect to degree of decentralization, in Table 24.

Practice in Yellowhead School Division. The Superintendent of Yellowhead School Division provided the researcher with an outline of the form of decentralized budgeting to be implemented in that system for 1977. After the pilot project in Edmonton Public, this practice represented the highest degree of decentralized school budgeting in the province in 1977. A decision was made not to include Yellowhead in the study because the practice had not been implemented at the time the selection was made. A brief outline of the practice is contained in Appendix D.

IV. SUMMARY

This chapter contained the findings for the first stage of the study. The chapter was divided into three main parts, the first of which considered the political-legal factors which served to constrain the implementation of decentralized school budgeting. Statutory and regulatory

Table 23

Characteristics of Systems Other than Edmonton Public Selected for Stage 2 of Study

	Nature of System			Nature of Budgeting Practice		
Legal Title of System[a]	Type of System	Enrolment Sept 30/76	Urban-Rural Nature	Type of Decentralization[b]	Policy on Carrying	Year of Implementation
Pilot						
County of Parkland #31	County	7,938	Urban and Rural	Authority	Yes	Before 1973
Study						
Bow Corridor Regional School District #5	Regional	1,253	Rural	Both	Yes	1975
Calgary School District #19	Public	85,837	Urban	Both	Yes	1974
Calgary Roman Catholic Separate S. Dist. #1	Separate	22,309	Urban	Flexibility	Yes	Before 1973
Camrose School District #1315	Public	1,926	Urban	Both	Yes	1974
Foothills School Division #38	Division	3,860	Rural	Authority	Yes	Before 1973
County of Strathcona #20	County	12,739	Urban and Rural	Authority	No	1974

[a] These and other systems are identified in this dissertation by their commonly-used titles; for example, "Calgary Public" and "Calgary Separate."

[b] Authority: In top 29 percent of scores on School Budget Authority Scale.
Flexibility: In top 26 percent of scores on Operational Flexibility Scale (high discretion).
Both: Has both Authority and Flexibility as defined above.

Table 24

Decentralized Items[a] on School Budget Authority Scale[b] in Systems Selected for Stage 2[c]

School Budget Item	Bow Corridor	Calgary Public	Calgary Separate	Camrose Public	Foothills S. Division	County of Strathcona
Certificated staff						
Number of administrators						
Number of classroom teachers				X		
Number of counsellors, teacher-librarians	X			X		
Use of substitute teachers	X			X	X	X
Non-certificated staff						
Number of teachers' aides				X	X	
Number of secretaries				X	X	
Number of caretakers					X	
Overtime work by caretakers for school activities	X		X		X	X
Services purchased						
Use of external consultants by school	X	X				X
Postage	X	X		X	X	X
Travel and subsistence for staff on school business	X			X	X	X

[a] X indicates a school decision is made on the amount allocated for this item, with central office confirmation, prior to consideration by the board.

[b] Details of responses for Operational Flexibility Scale are given separately in Chapters 6-12.

[c] Details for Edmonton Public are contained in Chapter 12.

Table 24 (continued)

School Budget Item	Bow Corridor	Calgary Public	Calgary Separate	Camrose Public	Foothills S. Division	County of Strathcona
Services purchased (continued)						
Transportation for students on field trips	X	X		X	X	X
Maintenance and repair of buildings	X		X			
Maintenance and repair of equipment	X		X			X
Rental of facilities for school activities	X				X	X
Enrolment fees for staff attending in-service activities	X			X	X	X
Registration fees for staff attending conferences	X	X		X	X	X
Printing of school newsletter	X	X		X	X	X
Advertising in local newspaper	X			X	X	
Supplies						
Purchase of instructional supplies	X	X		X	X	X
Purchase of textbooks for rental by students	X	X		X	X	X
Purchase of library books	X	X		X	X	
Purchase of audio-visual materials	X	X		X	X	
Capital Outlay						
Improvements to school grounds	X					
Structural alterations to school buildings						
Purchase of equipment	X	X		X	X	
Purchase of furniture	X	X		X		

requirements related to the administration of schools, the School Foundation Program Fund, conditional grants, financial reports, payment of salaries, curriculum and building, all tend to constrain the process. No constraints were found in the policy of the Alberta School Trustees' Association but the policy of The Alberta Teachers' Association with respect to the employment of teachers' aides constitutes a constraint on budget decisions related to staff. Decentralized school budgeting had not emerged as an issue in collective bargaining although the practice was being monitored in Edmonton Public.

The second part of the chapter reported the findings of a survey in all school systems in Alberta to determine the nature and extent of decentralized school budgeting. The data indicate that Alberta systems are generally relatively centralized, with school decisions typically made in the preparation phase for only eight of the twenty-seven items in the School Budget Authority Scale. In the administration phase, schools typically have discretion to make budget transfers for nine of the twenty-five listed in the Operational Flexibility Scale. Decisions in both phases typically concerned only the services purchased and supplies categories of budgets. There was little or no association between the type of system and the types of decisions made. Though different degrees of decentralization were found among the types of systems, the variables of type, size, and dispersion of systems accounted for little of the variance among systems on the different scales.

The third section of the chapter identified systems with decentralized school budgeting, operationally defined as scoring at the seventy-fifth percentile or higher on either or both of the School Budget

Authority Scale and the Operational Flexibility Scale (High Discretion). Seven systems were selected for further investigation in Stage 2 of the study. Chapters 6 to 12 contain case studies which examine the objectives, adoption, operation, and perceived outcomes of decentralized school budgeting in these systems.

Chapter 6

BOW CORRIDOR REGIONAL SCHOOL DISTRICT

The Bow Corridor Regional School District is located west of Calgary and consists of the small population centres of Banff, Harvie Heights, Canmore, Exshaw and Seebe, all of which are located on or near the Trans-Canada Highway in the valley of the Bow River.

The September 30, 1976, student enrolment was 1,253. The Regional District operates five schools, the furthest of which is located nineteen miles from central office in Canmore.

Establishment of Regional District

The Regional District was formally established on April 1, 1976, under Section 24 of *The School Act* which provides that two or more boards may enter into an agreement to establish a regional district under terms and conditions agreed to by the Minister. The parties to the agreement in this instance were the School Districts of Banff, Canmore, Exshaw, Seebe, and Harvie Heights. The agreement includes the purpose of "offering an educational program not otherwise available to member districts, and to foster more effective, efficient and economical school operations."

The terms of the agreement require that the board of the Regional District consist of seven trustees--two from Banff, two from Canmore, and one each from Exshaw, Seebe, and Harvie Heights. These trustees must be trustees of the parties to the agreement. With certain important exceptions, the Regional Board has all of the powers, functions, and duties of the board of a division, while the parties to the agreement operate as local advisory boards to the Regional Board. The major exception is that the Regional Board has no power to requisition funds. This power remains with the parties to the agreement who make prorated contributions to the cost of operation of the Regional District on the basis of their equalized assessments. The member parties maintain ownership of the school buildings. All personnel are employed by the Regional Board.

The parties indicated their intention in the agreement to pursue the process of the formation of a school division under Section 15 of *The School Act* with a target date of October 31, 1977. This process has been constrained, however, by developments in Banff. The Board of Banff School District is the only elected body in Banff National Park and has responsibility for certain municipal services in addition to its educational function. Unlike other parties to the agreement, the Banff Board cannot vote to dissolve itself. A recent plebiscite to approve the formation of a separate municipal body was defeated thus requiring the Banff School District to remain in existence.

Administration

The Superintendent is the only professional educator working in the central office of the Regional District. He was appointed in August 1974, to provide superintendency services to the parties to the agreement. His predecessor served for one year, prior to which superintendency services were provided from the Regional Office of Education in Calgary.

The Secretary-Treasurer was appointed April 1, 1976, at the time of formation of the Regional District. He was Secretary-Treasurer of the School Districts of Banff, Canmore, Exshaw and Seebe from November 1975 until March 1976, and previously, was Secretary-Treasurer of the Banff School District from January 1974. An Assistant Secretary-Treasurer (Accounting and Purchasing) is also employed.

The Schools

The characteristics of schools operated by the parties to the agreement are summarized in Table 25 together with enrolment trends for each centre for the period 1965-74. The latter show a general decline in enrolment compared to a provincial increase of 15.5 percent over the same period.

Table 25

Student Enrolment in the Regional District

Centre	Type of School	Approximate 1976 Enrolment	Enrolment Trend 1965-74[a]
Banff	Elementary Jr - Sr High	235 300	- 9.0%
Canmore	El - Jr - Sr High	520	-10.1%[b]
Exshaw	El - Jr High	193	+ 7.7%
Seebe	Elementary	14	-36.0%
Harvie Heights	No school	---	---

[a] Source: Alberta, Department of Education. Annual Reports 1966, 1970, 1974-75.

[b] The Superintendent reported a more recent population shift from Banff and Exshaw to Canmore.

Collection of Data

Interviews were conducted with the Superintendent, the Secretary-Treasurer, and the principals of the five schools in the system. Other information was obtained from the questionnaire completed by the Superintendent in the first stage of the study and statements of policy. Several school budgets were examined and a budget meeting of the Regional Board was observed.

Decentralized School Budgeting

The questionnaire completed by the Superintendent indicated that school decisions were made on allocations for twenty-one of the twenty-seven items on the School Budget Authority Scale. This represented the highest degree of decentralization of any system in this study. The system also ranked in the top twenty-five percent on the Operational Flexibility Scale with schools having a high degree of discretion to make budget transfers within and between the supplies and services purchased categories, and within each of the certificated and non-certificated staff categories. No provision was made for schools to carry a surplus or a deficit except for procedures which permitted purchases to be made in the period November 1 - December 31.

Questionnaire responses were consistent with policy and procedure observed during the visit to the Regional District and with responses given in interviews.

Decentralization Policy

Prior to the formation of the Regional District, each school worked directly with its board in preparing annual estimates. Thus, when viewed from the perspective of the constituent districts, current practice may be considered more centralized since the additional review and approval process at the Regional District level meant the movement of authority to a central source of power. Expressed another way, while current practice is relatively decentralized when viewed from the perspective of the Regional District, it was not achieved through a process of delegation of authority from a central source of power. The implication of this analysis is that the current pattern of decentralized school budgeting had its foundation in the procedures in place prior to the formation of the Regional District rather than through the formal adoption of a policy of decentralization.

The Superintendent indicated that a number of policies have been established and decisions made which are having the effect of formalizing the procedures in the Regional District and extending decentralization. The Regional Board adopted a policy supporting the concept of Program Accounting and Budgeting which the Superintendent believed requires the involvement of schools in establishing an educational plan and a financial plan to support it. More generally, however, the Superintendent has sought to increase the authority and responsibility of the principal. A willingness to accept a high degree of responsibility in identifying program needs and budgeting was a criterion for selection of three principals when positions became vacant in 1975. Principals have been working with the Superintendent in an extensive in-service program designed to assist principals in the selection and development of competent staff. Board policy requires principals to maintain records of all accounts included in school budgets with the Superintendent fostering the principle that these accounts should be controlled at the school level.

CHANGE PROCESS

Budget Practice Before Decentralization

The Superintendent recalled that there were five Secretary-Treasurers at the time of his appointment and, except in Banff where two schools were operated, each principal worked directly with the Secretary-Treasurer and board members in preparing estimates. These usually consisted of adding an inflationary factor to the previous year's expenditure in each individual account.

The Superintendent made no major change to budget practice for 1975, focusing instead on the more urgent need of improving the management and accounting system in general. A diversity of accounting procedures was employed at the time of his appointment, ranging from the standard accounting system used in Banff by the person who is presently Secretary-Treasurer for the Regional District to quite informal practices in some other centres.

Recognition of the Need for Change

It was noted above that current practice had its foundation in procedures employed prior to the creation of the Regional District. The Superintendent considered that the historically close relationship between school and board in each of the small constituent districts was the major factor in accounting for the present pattern. He considered that it would be difficult to install decentralized school budgeting as currently practised in a long established School Division.

Questions in the interview sessions focused on the identification of factors contributing to the more formalized practice using the PAB format in written budget documents prepared at the school level and adopted in 1976 and 1977 rather than the relatively informal discussion of estimates which occurred previously. These questions were concerned with planned change from traditional practice.

Internal factors. Table 26 summarizes the internal factors identified by the respondents. The appointment of the new Superintendent was the most frequently cited factor with five of the seven respondents referring to his philosophy and management strategies and especially, his previous experience with Program Accounting and Budgeting. Prior to his appointment in 1974, the Superintendent had spent four years with the Department of Education including a period as a consultant assisting with the piloting and introduction of PAB in the province. The second major internal factor was the appointment of three new principals in 1975 all of whom showed an enthusiasm for a high degree of involvement. The principal appointed in 1974 also had a particular interest in a decentralized approach. Three respondents identified these appointments as external factors, consistent with Katz and Kahn's (1975:67) view that disequilibrium is a consequence of "changed inputs from the environment." Their inclusion here as internal factors is in accordance with the framework for the analysis outlined in Chapter 4.

Table 26

Internal Factors Underlying Decentralized School Budgeting in Regional District

Individual or Group Articulating Interest	Description	Frequency: Central Office (N=2)	Frequency: Principals (N=5)
Superintendent	Management strategies based on his philosophy and experience	2	3
Trustees, Central Office	The need for an effective common accounting and management system	1	1
Principals	The interest of principals especially those hired in 1974 and 1975	2	2
All system personnel	The tradition of school involvement in budgeting	1	1

External factors. The Superintendent and three principals identified the PAB system required by the Department of Education as an external factor. The Superintendent saw PAB as facilitating the task of developing order in the management and accounting system.

Decision. The essential ingredients of a decentralized approach to budgeting were in place at the time of the appointment of the Superintendent. His familiarity with PAB and commitment to a high level of school decision-making, together with the appointment of committed principals, appear to be the major factors in formalizing the practice.

Three principals were appointed in the fall of 1975 with one criterion for selection being a commitment to a high degree of responsibility in budgeting. This was the first experience in the principalship for two appointees. The Superintendent perceived the changing role of the principal to be a factor in the resignation of their predecessors. This changing role concerned not only new expectations for the principal but also its relationship to the recent appointment of a superintendent. Principals were previously responsible directly to their boards.

The process of attrition resulted in the eventual appointment of the Secretary-Treasurer from Banff to the position of Secretary-Treasurer of four of the systems in the fall of 1975.

The decision to adopt the change was made in the fall of 1975 by the Superintendent's Council, a group consisting of the Superintendent, the principals of the four multi-room schools, and the Secretary-Treasurer. The Superintendent viewed this as an administrative decision although the different school boards had accepted the concept of budget preparation in the PAB format.

Planning the Change

No discrete planning phase was identified in the change process.

Implementing the Change

The implementation phase was considered to commence at the time the decision was made in the fall of 1975 and was still in effect at the time of the study in February 1977. The Superintendent summarized the situation by observing that "we're certainly in a developmental phase." Apart from a review of in-service activity, details of the procedures and problems of implementation will be considered as current budget practice in the next section of the chapter.

The major in-service activity was a four-day retreat for principals and the Superintendent in November 1975 during which principals completed preparation of their 1976 budgets and became more familiar with the PAB system. One principal indicated that "without this workshop I would have been lost on the job." This opportunity was also used to prepare a draft of the policy handbook for the new Regional District using samples from other school systems. School secretaries attended in-service activities at central office on two occasions largely for the purpose of acquiring more information about the new purchasing and accounting procedures. No formal in-service activities were organized for teachers and trustees. Principals in all but the one-teacher school reported that teachers were introduced to PAB and the new budget procedures at staff meetings.

Stabilizing the Change

The continuing changes in procedure and role over the period 1975-77 suggested that a stabilization phase had not yet developed.

CURRENT BUDGET PRACTICE

Preparation of Budget

Two budgets had been prepared since the change was adopted. Each is discussed from the perspectives of time, task, and personnel at each of three levels; namely, Board, central office and school.

Board involvement. The major differences between procedures for 1976 and 1977 were: (1) the additional review and adoption process for the 1977 budget resulting from the formation of the Regional District, and (2) the use of uniform procedures in 1977. For the 1976 budget, preparation at the school level occurred in October and November with a central office review in November, and review and adoption by boards in the period December to February 1976. For the 1977 budget, the central office review in November 1976 was followed by a local board review in December, a tabling and review by the Regional Board in January and February 1977, with a final review and possible approval by local boards and final adoption by the Regional Board to follow. Each school used its own form in preparing the 1976 budget but, for 1977, a form found to be effective in one school was adopted for the system.

At the time of data collection, it was not certain if final approval by each local board was required. The Superintendent subsequently indicated that all local budgets were formally adopted by the respective boards.

Central office involvement. The Superintendent indicated that principals are encouraged to observe the spirit of program budgeting, that is, to identify program needs and budget accordingly, rather than retain an incremental approach of basing estimates for each item primarily on expenditure in the previous year. The Superintendent's role in budget preparation was to issue guidelines to schools in September and discuss each budget with principals in November. Schools have been requested to budget on the basis of the total expenditure in the previous year with the addition of an inflationary factor (eight percent for the 1977 budget). The Superintendent reported that changes to budget estimates are recommended where there is inconsistency with board policy, curriculum trends, or projected funding and staffing patterns. The

Secretary-Treasurer prepares budget forms for distribution to schools, verifies calculations when budgets are submitted, and consolidates estimates for inclusion in the Regional District budget.

The Superintendent indicated that he now spent less time preparing the budget for the Regional District than he did when separate system budgets were prepared but spends more time on preparing school budgets. The Secretary-Treasurer was not asked to make a comparison because of the recency of his appointment.

School involvement. Major changes in role occurred at the school level for the preparation of the 1976 budget. In addition to preparation in the more complex PAB format, teachers were involved in a major way for the first time. It was also the first occasion the principal in the one-room school had been required to prepare a budget since the Secretary-Treasurer in that district had performed this task in previous years. Two schools made major changes in positions of responsibility to accommodate the change, with the elementary-junior-senior high appointing four division heads instead of two assistant principals and one elementary school restructuring curriculum committees to conform with PAB program classifications.

Three principals asked teachers to submit estimates for the 1976 budget while another prepared the budget himself on the basis of 1975 expenditures and obtained the approval of teachers at a staff meeting. Similar procedures were employed for the 1977 budget except that the principal who prepared by himself in 1976 involved department heads in the preparation of estimates. Budget preparation in both years generally occurred in October and November.

Only two principals were in a position to make a comparison of time presently spent on budgeting with that before the adoption of the change. One considered that all school administrators and the school secretary spent more time on preparing the budget but teachers spent about the same amount of time. He anticipated that the time required will decrease as school personnel become more familiar with the process. The principal in the one-room school also considered that he now spent more time on budgeting.

Administration of the Budget

This section provides information on the procedures employed in the administration of the 1976 budget in respect to transfer, carrying forward, purchasing, control, and reporting.

Transfers

No formal procedures were established in 1976. Apart from budget items designated for particular purposes by the boards or the Superintendent, principals were free to requisition according to need during the year. This meant that the different accounts revealed a pattern of over- and under-expenditure as the year progressed. Three principals indicated that they generally informed the Secretary-Treasurer in instances where expenditure varied from budget estimates.

Carrying a surplus or deficit

There was uncertainty and inconsistency among respondents in respect to policy for carrying a surplus or a deficit. The Superintendent indicated that the practice was desired but he was awaiting an audit of 1976 finances to determine the manner in which it could be implemented. One principal believed that a carry-over was in order while three principals, whose local boards were in a deficit position, understood that no carrying could take place. The fifth principal was not familiar with procedure.

Purchasing. The Regional District has centralized purchasing with school requisitions authorized by the principal and processed by the Assistant Secretary-Treasurer.

Control. The Superintendent expressed concern at existing procedures for controlling expenditures and perceived that trustees may wish to see change in this area. Regional District policy permits central office signing of cheques for operational expenditures within the approved annual budget with the exception of equipment purchases in excess of $100. The Superintendent indicated that Board approval had not always been sought for the latter and that no systematic monitoring of school expenditures to detect possible violation of other budget guidelines had been instituted.

The requirement that principals authorize requisitions facilitates control at the school level. Four schools have secretaries, designated as administrative assistants, whose duties include bookkeeping. The teacher at the one-room school does not keep books but retains copies of requisitions.

Financial reports. The system of monthly computerized reports was instituted in 1976. The Superintendent indicated that he does not regularly monitor these while the Secretary-Treasurer felt that they should include a report of variance from estimates included in the approved budget. All principals reported difficulty in reading the reports with two indicating that school accounting procedures have been changed to facilitate comparison. Two other principals make no attempt to reconcile school books with computer reports but scan the latter to locate possible errors.

Only the Superintendent and two principals were able to make comparisons of the time spent on administering the budget with that spent prior to the change. The Superintendent felt that he spent the same amount of time now for school budgets and for the system budget. One principal perceived that the change had resulted in more time being spent by him and his administrative assistant on purchasing but that other school administrators and teachers spent the same amount of time. Only the administrative assistant was concerned with bookkeeping and the time required increased as a result of the change. The principal of the one-room school reported that he spent less time on purchasing now that it was centralized while time spent on record-keeping was unchanged since he had never performed this task.

Current Problems in Budgeting

Problems encountered by trustees. The Superintendent perceived three problems encountered by trustees: (1) a lack of base-line data for comparative purposes during the preparation of the budget, (2) the complexity of PAB forms which contributed to a difficulty in understanding budget practice, and (3) a different perspective than the Superintendent on the need to approve specific expenditures within categories approved in the original budget.

Problems encountered at central office. The Superintendent indicated that his main problem was one of budget control. He referred to problems in communication and the lack of time to monitor the process. The Secretary-Treasurer perceived the need to develop a reporting procedure which would be suitable for the Superintendent to communicate with trustees. Four principals identified problems experienced by the Superintendent which related to their particular local circumstances. One referred to inequities arising from the different tax bases in the Regional District, two referred to the acute problems experienced in Banff where a plebiscite for a supplementary requisition exceeding the limits set out in provincial regulations was defeated in 1975, while another referred to difficulties experienced by the Superintendent in projecting enrolment trends, especially with a recent population shift from Banff and Exshaw to Canmore. The last-mentioned also referred to difficulties in convincing trustees of the value of an innovative program. The principal of the one-room school did not perceive any problem at central office.

Problems experienced by other central office personnel covered the office of several Secretary-Treasurers. The Superintendent felt that the present Secretary-Treasurer did not have sufficient time to manage the system and that the present uncertainty was itself a problem. The Superintendent felt that the Secretary-Treasurer and his staff experienced problems with coding initiated at the school level. The Secretary-Treasurer indicated that his major problem was associated with different coding interpretations made by principals and central office personnel and the practice of some principals of billing an item to an incorrect account to avoid over-expenditure in the correct account. Two principals recognized the coding problem while the difficulty experienced by the Secretary-Treasurer in setting up the operational aspects was also mentioned twice. One principal mentioned, in particular, the problems associated with establishing the computer reporting system. Two principals recalled problems in late 1975, when the Secretary-Treasurer was involved with the Banff plebiscite, while another referred to the resignation of a local Secretary-Treasurer and perceived that the increased demands of the new PAB and computer system were the contributing factors.

Problems encountered in schools. The frequencies with which each type of problem experienced by principals, teachers, and secretaries was reported are summarized in Table 27.

Principals reported a variety of problems related to the preparation and administration of budgets. The problems of preparation were concerned, in two instances, with the total situation in Banff where three forms of the 1976 budget had to be prepared in anticipation of alternative results in the 1975 plebiscite and again, following a subsequent ministerial review. Two principals reported uncertainty resulting from budget preparation occurring at the school level several months before the announcement of government grants. Only one principal indicated that lack of experience was a problem while the principal of the one-room school did not see problems at any level of the school system.

While central office personnel reported a smaller range of problems at the school level, those identified were consistent with the perceptions of principals.

Table 27

Current Problems Encountered by School Personnel in Regional District

Persons Encountering Problems	Stage in Budgeting Process	Reported by Principals (N=5)		Reported by Central Office Personnel (N=2)	
		Description of Problem	Frequency	Description of Problem	Frequency
Principals	Preparation	Role: (1) having to prepare several budgets (Banff)	2	Information: lack of base-line data	1
		(2) lack of experience	1		
		(3) inclusion of maintenance	1		
		Information: (1) delay in learning government grants	2		
		(2) lack of base-line data	2		
		Allocation: insufficient funds	1		
	Administration	Purchasing: coding	2	Purchasing: coding	1
		Accounting: (1) difference between actual and estimated costs	1	Accounting: difference between actual and estimated costs	1
		(2) establishing a system	1	Transfer: frequency	1
		Reporting: adequacy and frequency	2	Carrying: uncertainty	1
				Reporting: adequacy and frequency	2
Teachers	Preparation	Allocation: insufficient funds	1		
	Administration	Transfer: new teachers in fall seeking change	1		
		Accounting: lack of uniform bookkeeping within school	1		
Secretaries	Administration	Purchasing: coding	4		

Disagreements

Superintendent. Table 28 contains the perceptions of the Superintendent on the frequency of his disagreements with Regional District personnel on matters related to budgeting. No judgments were sought of the effect of decentralized school budgeting on the frequency and severity of disagreements with trustees and the Secretary-Treasurer because of the change in the organizational structure but he perceived that there had been no difference in the frequency and severity of his disagreements with principals and other central office personnel.

The examples cited by the Superintendent were similar to the problems identified earlier in the chapter particularly as they concerned differences with trustees on authority to approve expenditure and on the adequacy of financial reports.

Table 28

Perceptions of Superintendent on Disagreements in Regional District

Persons in Disagreement	Frequency	Example
Superintendent and Trustees	Occasional	1. Interpretation of policy and guidelines on authority. 2. Frequency of financial reports
Superintendent and Secretary-Treasurer	Seldom	None recalled
Superintendent and Other Central Office Personnel	Seldom	Coding of expenditures
Superintendent and Principals	Seldom	Amount of money available

Principals. Principals were asked to give their perceptions of disagreements with the Superintendent, their local board, the Secretary-Treasurer, teachers, and administrative assistants. The responses summarized in Table 29 indicate that, in most instances, the frequency of disagreements was "seldom" or "never."

Disagreements with the Superintendent and local boards mostly concerned the availability of funds while those with the Secretary-Treasurer and administrative assistants concerned the coding used in the accounting system. Disagreements with teachers resulted from differing priorities assigned to proposed expenditure.

The two principals in a position to make comparisons reported that the adoption of the new procedures had no effect on the frequency and severity of disagreements with any of the persons listed. These principals also reported no disagreements with school system personnel.

OBJECTIVES AND OUTCOMES

Objectives

Formal objectives. No formally-stated objectives have been prepared for school budgeting practice in the Regional District.

Perceptions of respondents. The Superintendent and principals were asked to give their perceptions by indicating the value placed on each of eight objectives included in the schedule. Table 30 contains a summary of responses together with perceptions of the progress which had been made toward the attainment of objectives.

Table 29

Principals' Perceptions of Disagreements in Regional District

Persons in Disagreement	Frequency of Disagreement				Example
	Often	Occasionally	Seldom	Never	
Principals and Superintendent	0	0	3	2	Amount of money available (2)
Principals and Local Boards	0	1	1	2	1. Allocation for furniture 2. Authority for authorizing expenditure 3. Value of reading program
Principals and Secretary-Treasurer	0	1	2	2	1. Coding of expenditure (2) 2. Overspending in one area of budget
Principals and Teachers	0	1	2	2	Differing priorities of principal and teachers (2)
Principals and Administrative Assistants	0	0	1	3[a]	Coding of expenditure

[a] The one-room school has no administrative assistant.

Table 30

Objectives of Decentralized Budgeting in the Regional District:
Perceived Value and Progress

Objective	Criterion	Evaluation of Principals (N=5) and Superintendent[a] None	Little	Some	Much	Great	Don't Know
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	0	0 (1)	5	0
	Progress	0	0	0	1 (1)	4	0
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	0	0 (1)	5	0
	Progress	0	1	1	2	0	1 (1)
3. To provide a more equitable allocation of funds among schools	Value	1 (1)[b]	0	0	1	3	0
	Progress	1 (1)[c]	0	2	1	1	0
4. To obtain more efficient use of funds allocated to each school	Value	0	0	0	0	5 (1)	0
	Progress	0	0	3 (1)	0	1	1
5. To provide schools with greater flexibility in the development of the instructional program	Value	0	0	0	2 (1)	3	0
	Progress	0	0	2	1 (1)	1	1
6. To encourage school and teacher innovativeness	Value	0	0	1 (1)	0	4	0
	Progress	0	0 (1)	2	2	1	0
7. To reduce the time required to meet changing school needs	Value	0	0	1	1	3 (1)	0
	Progress	0	0	3	1 (1)	1	0
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Value	0	0	0	1	4 (1)	0
	Progress	1	1	1	1 (1)	0	1
Other							
To provide trustees with an appropriate role in the decision-making process for the allocation of funds	Value				(1)		
	Progress			(1)			

---

[a] Superintendents' responses shown in parentheses.

[b] Interpreted as "equity in amount of money allocated." Response would be "much" if equity defined in terms of meeting needs.

[c] Interpreted as "equity in amount of money allocated." Response would be "some" if equity defined in terms of meeting needs.

Objectives valued highly by the Superintendent (considered as having "much" or "great" value) were those related to teacher and principal involvement, efficiency, flexibility, adaptability, and cost awareness. He added the objective of providing trustees with an appropriate role in the decision-making process for the allocation of funds; namely, the role of policy-makers, leaving other matters to management and the principals.

The Superintendent did not place high value on the objective related to innovativeness. He also questioned the value of the equity objective if this meant equity in terms of money allocated. If equity was considered as meeting the needs of each school then his evaluation would be "much."

Principals generally valued all objectives listed in the schedule (using the criterion of "much" or "great" value by at least three of the five principals). Two principals questioned the equity objective in the same terms as the Superintendent.

Outcomes

Objectives valued highly by the Superintendent (considered as having "much" or "great" value) were those related to principal and teacher involvement, efficiency, flexibility, adaptability, cost awareness, and trustee involvement. Using the same criterion, he saw a high degree of progress in achieving principal involvement, flexibility, adaptability and cost awareness. The responses suggest that the Superintendent would like to see more efficient use of funds and a more appropriate role for trustees as policy-makers in school budgeting. The

Superintendent was not aware of progress made in the involvement of teachers in budgeting.

Principals generally valued all objectives listed in the schedule (using the criterion of "much" or "great" value by at least three of the five principals). Using the same criterion, a high degree of progress was generally seen for only two of these--principal involvement and innovativeness. The responses suggest that principals would like to see more teacher involvement, a more equitable and efficient use of funds, increased flexibility and adaptability, and a greater awareness of the relationship between program objectives, outcomes and the costs involved.

The differences between the Superintendent and principals are summarized in Table 31.

The Superintendent elaborated on the issue of equitability by noting that he feels this should be related to meeting the needs of schools on an equitable basis rather than providing standardized allocations. He indicated that some Regional District trustees make comparisons on a per pupil basis in their review of budgets. The researcher observed such comparisons while attending a budget review meeting of the Regional Board. The situation reflects the different tax bases and the difficulty of putting into effect the agreement establishing the Regional District.

SUGGESTIONS FOR CHANGE

The Superintendent and principals were asked to suggest changes in respect to: (1) school budget authority, (2) operational flexibility, and (3) carrying forward a surplus or a deficit. Responses for

Table 31

Outcomes for Highly Valued Objectives in Regional District

Objective	Superintendent's Evaluation		Principals' Evaluation	
	High Value	High Progress	High Value	High Progress
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Yes	Yes	Yes	Yes
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Yes	Not Known	Yes	No
3. To provide a more equitable allocation of funds among schools	No	No	Yes	No
4. To obtain more efficient use of funds allocated to each school	Yes	No	Yes	No
5. To provide schools with greater flexibility in the development of the instructional program	Yes	Yes	Yes	No
6. To encourage school and teacher innovativeness	No	No	Yes	Yes
7. To reduce the time required to meet changing school needs	Yes	Yes	Yes	No
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Yes	Yes	Yes	No
Other				
To provide trustees with an appropriate role in the decision-making process for the allocation of funds	Yes	No	Not Applicable	

"carrying" were made on the assumption that this could be accomplished at the time of the interview.

Superintendent

The Superintendent would prefer no change in school budget authority and the carrying forward of a surplus or a deficit. He would prefer, however, that schools have less discretion to transfer funds from one category of the budget to another. This could be achieved through requiring approval from central office before transfers could be made. An additional area of change preferred by the Superintendent was the synchronization of the school and budget years, a change presently constrained by *The School Act* which designates the calendar year as the period for reporting estimates and financial statements. In general terms, the Superintendent would like to see the full implementation over the next five years of the budgeting system presently in its developmental stage.

Principals

Without exception principals preferred to maintain the existing degree of decentralization in the three areas presented for consideration. Changes in other aspects were proposed with one principal preferring to spend less time on budgeting, another seeking improved computer printouts and more workshop activity to become familiar with the practice, while a third would like to see more progress in achieving the objective related to cost awareness in addition to orienting new trustees to budget practice. Another principal would like local boards to retain authority to approve school budgets. One principal saw no aspects of budget practice in need of change.

In discussing a preferred state in five years' time, two principals referred to the development of an improved data-base, with one describing more detailed program costs and the other referring to improved predictions of enrolments and costs. A third principal would like local school boards, on becoming local advisory bodies in a School Division, to retain a strong role in budgeting. He would oppose any move to create uniformity such as a division-wide teacher-pupil ratio.

GENERAL EVALUATION

The Superintendent indicated that, while he was "moderately satisfied" with the value of decentralized school budgeting, he was presently "moderately dissatisfied" with the progress which had been made. Three principals indicated that they were "highly satisfied" while two reported they were "moderately satisfied." One of the latter drew the same distinction as the Superintendent by rating "highly satisfied" for value but "moderately satisfied" for progress.

These responses suggest an important difference between levels of satisfaction of the Superintendent and principals. The latter have a high degree of satisfaction and spoke positively of the autonomy they enjoy. The Superintendent, on the other hand, illustrated his dissatisfaction by referring to the need to establish a greater degree of control and to communicate more effectively with trustees who generally perceive a loss of power as a result of the change.

FURTHER DISCUSSION

The information contained in this chapter is examined further in Chapter 13, where it is consolidated with that reported for other systems included in the second stage of the study. This comparative review, presented against the theoretical background of Chapter 2 and the review of literature in Chapter 3, is organized under the following headings:

Forces Influencing the Adoption of Decentralized School Budgeting.

Objectives of Decentralized School Budgeting.

Change Strategies.

Problems of Implementation.

Preparation and Administration of School Budgets.

Operational Problems.

Disagreements in Decentralized Budgeting.

Attainment of Objectives.

Preferences for Change.

Satisfaction with Decentralized School Budgeting.

Chapter 7

CAMROSE PUBLIC SCHOOL DISTRICT

The City of Camrose has a population of approximately 10,000 persons and is located fifty-eight miles south-east of Edmonton in the farming belt of central Alberta. The city supports public and separate school districts with September 30, 1976, pupil enrolments of 1,926 and 509 respectively. The administrative offices of the surrounding County of Camrose are also located in the city.

School System

Schools. Camrose Public School District operated five schools in 1976-77: one elementary, two elementary-junior high, one senior high, and a school for the mentally retarded, in addition to an early childhood program in two other buildings in the city. The furthest school is located two miles from central office.

Camrose Composite High School also serves students from the Separate School District and the County, neither of which operates a senior high school. In addition to 741 students enrolled in this cost-shared program, the school also operated an Industrial Arts and Home Economics program for one half-day per week for each of the 889 junior high students in the three systems.

The school for the mentally retarded has been operated by the School District since September, 1975. It was formerly the responsibility of the Camrose and District Association for the Mentally Retarded.

Administration. The Superintendent administers the school system with the assistance of a Chief Deputy Superintendent and a Secretary-Treasurer. The Chief Deputy Superintendent was appointed in September 1976 and is the first occupant of this position. He supervises Early Childhood Services, the Educational Opportunities Fund, Special Education, counselling and testing services, curriculum development, student attendance, staff recruitment and placement, and program and staff evaluation. The Secretary-Treasurer supervises the maintenance, custodial, and clerical staff of the system and assists the Superintendent in the preparation and administration of the system budget.

Enrolment trends. Table 32 compares ten-year enrolment trends in the School District with those experienced across the province. A rapid increase in the late sixties has been followed by a decline in the seventies.

Table 32

Enrolment Trends in Camrose Public[a]

Period	Change in Enrolment (per cent)[b]	
	Camrose Public	Alberta
1965-69	24.5	12.4
1970-74	(8.5)	(1.5)
1965-74	12.3	15.5

[a] Source: Alberta, Department of Education. Annual Reports 1965, 1970, 1974-75.

[b] Figures in parentheses represent a decline in enrolment.

Collection of Data

Interviews were conducted with the Superintendent, Secretary-Treasurer, the principals of the five schools, the principal of the early childhood services program, and the former assistant principal of the composite high school, now a superintendent in another system, who was identified by the Superintendent as a person influential in the decision to adopt decentralized school budgeting.

One of the five principals was appointed in September 1976 and responded only to questions which concerned budget practice since his appointment. The same procedure was employed with the principal of the school for the mentally retarded. The principal of the early childhood services program does not submit a budget to the Board although she participates extensively by providing a statement of needs to the Chief Deputy Superintendent. The questions posed to this principal were concerned only with procedures for determining allocations in her program, and unless specifically indicated, are not tabulated in this report. The interview with the former assistant principal was conducted by telephone and was delimited to questions related to the factors underlying the adoption of decentralized school budgeting.

Other information was obtained from the questionnaire completed by the Superintendent in the first stage of the study and from drafts of proposed statements of policy to be considered by the Board in 1977.

Degree of Decentralized School Budgeting

The questionnaire completed by the Superintendent indicated that the system ranked second on the School Budget Authority Scale,, with school decisions made on allocations for eighteen of the twenty-seven items in the scale. This was the only system in the province to report a school decision on the number of teachers.

The system ranked first in the province on the Operational Flexibility Scale, with schools having high discretion to make twenty-one of the twenty-five types of transfers listed in the scale. All transfers were possible except those from non-certificated staff, services purchased, supplies, and capital outlay to the category of certificated staff.

The questionnaire indicated that schools carried forward the total amount of a surplus and a limited amount of a deficit for some items in the budget. Decentralized school budgeting was implemented for the 1974 budget year.

Questionnaire responses were consistent with statements of policy and the procedures observed in the system with the exception of decisions on both scales related to allocation of staff. The questionnaire indicated that school decisions, with central office confirmation, were made for the number of classroom teachers, counsellors and teacher-librarians, teachers' aides, secretaries, and the use of substitute teachers. These items were not included in the budget estimates prepared by schools for consideration by the board. The Superintendent indicated that principals make requests for staff in the spring and that these are considered on the basis of need, existing patterns in the system, and total District resources. It would appear that these decisions involve a high degree of school participation but fall short of the definition of decentralization adopted for the study. Further discussion with the Superintendent and principals confirmed that these are not presently perceived as being decentralized.

Decentralization Policy

Decentralized school budgeting was not established as part of a formal and explicit policy of decentralization in the School District. The Superintendent indicated, however, that it was part of a general practice of decentralization he had encouraged since his appointment in 1973. He felt that principals were capable of assuming more responsibility.

A statement of policy was under consideration at the time of this study. The Superintendent advised that this generally described 1976 practice with some modifications, discussed later in this report, for 1977. The statement indicated that:

> The Board of Trustees endorses the existence of a mini-budget for each school under its jurisdiction. The mini-budget will reflect the following policy:
>
> 1. There shall be a fair distribution of District money to all schools.
> 2. There shall be local control of available money . . . .

CHANGE PROCESS

Budget Practice Before Decentralization

A high degree of centralized school budgeting was employed in the School District until 1974. Schools submitted lists of equipment and other capital requests which were considered by the Board on the basis of a recommendation from the Superintendent. Instructional supplies were requisitioned from central office as the need arose, subject to limits established by the Superintendent, although allocations on a classroom and student basis without transferability were introduced shortly before decentralization. Schools did not submit budget estimates.

Recognition of a Need for Change

The Superintendent, the Secretary-Treasurer, three persons who were principals in the system at the time, and the former assistant principal at the composite high school gave their recollections of the factors contributing to the adoption of decentralized school budgeting.

Internal factors. Table 33 summarizes the classification of forces perceived to be operating inside the school system. The two identified most frequently were the interests of the Superintendent and the administrators of the composite high school, especially the assistant principal. The Superintendent indicated that no major changes were attempted following his appointment in 1973 until the assistant principal articulated a strong interest in decentralization. The latter recalled that this interest existed as a result of two influences: (1) his recent experience as a principal in another school system which had introduced decentralized school budgeting, and (2) his awareness of the effective allocation of funds in a decentralized curriculum development project with which he was acquainted. The principal of the composite high school explained

Table 33

Internal Factors Underlying Decentralized School Budgeting in Camrose

Individual or Group Articulating Interest	Description	Frequency Central Office (N = 2)	Frequency Principals (N = 4)[a]
Superintendent	Interest of Superintendent in the practice	1	4
School administrators			
(1) composite high school	Interest of administrators, especially the assistant principal, in the practice	2	2
(2) generally	Interest of principals in becoming more involved in budgeting	0	2
School Board elected in 1974	Support of School Board elected in 1974	0	2

[a] Included the former assistant principal of composite high school.

that his interest was generated by the complexity of the school operation and the amount of time and difficulty associated with communicating the needs of the school to the Board.

The Superintendent recalled that he raised the issue several times with the Board but received strong opposition on each occasion. Some decentralization was introduced for the 1974 budget but the practice was more soundly established in 1975 following the triennial election for the five-member board in the fall of 1974. Three members were elected for the first time, replacing two trustees who had served for more than ten years and the Chairman, who had served in that position for twenty-one years. The new board did not raise opposition to an expanded form of the practice implemented in 1975.

Several respondents referred to the traditional, centralized approach used in the development of budgets by the former Superintendent. The former assistant principal, interpreting the events at the time, suggested that budgeting was not an issue for school personnel while funds were plentiful in the late sixties and early seventies. However, the financial constraints imposed by the provincial government were felt shortly before the former Superintendent died in 1973 and following the appointment of the present Superintendent. Principals became critical of the procedures used in allocating funds. The new Superintendent was responsive to these concerns and the other interests discussed above.

External factors. The former assistant principal identified the financial constraints imposed by the provincial government as one factor influencing the adoption of the practice. This is considered an economic factor in the framework for analysis in this study. A legal factor which facilitated the change, in the judgment of one central office administrator and two principals, was the PAB system introduced in the province in 1974.

Decision. It appears that decentralized school budgeting was introduced in 1974 as a result of a strong interest on the part of the recently appointed assistant principal and the increasing concern of some principals at the method of allocating resources in a time of financial constraint. The new Superintendent, who had also expressed an interest in decentralization, gave the proposal his support. The opposition of the Board constrained the extent of decentralization in 1974 but the tacit support of the incoming Board permitted a higher degree of decentralization in 1975. PAB provided a convenient framework for the practice.

The Superintendent indicated a reluctance on the part of principals to immediately assume the responsibilities of decentralized school budgeting despite the initial interest of some administrators. Several proposed that it be implemented over a period of three years but the Superintendent decided that an immediate change was preferable. These discussions were held at a regular meeting of the Superintendent and principals. There was no Principals' Association at the time.

Principals made no reference during interviews to reluctance on their part to assuming increased responsibility. All three perceived principals to be generally supportive. The former assistant principal, however, elaborated on his suggestion made at the time for a gradual implementation. His experience with decentralized budgeting in another system indicated that time was needed to develop accounting and reporting procedures at the central office and school levels which would enable all concerned to have accurate and timely information. He recalled that these procedures were not yet established in the District.

The Superintendent decided to obtain budget estimates from schools for 1974 using the categories of the PAB system implemented in the same year. No decision was made by the Board to approve this aspect of the budget process.

Planning the Change

No discrete planning phase was identified for the adoption of decentralized school budgeting. The Superintendent recalled seeking assistance from the Department of Education but found the response to be of little value. He proceeded to implement the change in January 1974.

Implementing the Change

Schools were requested to submit budget estimates in a number of categories of the PAB classification along with their usual list of capital needs. Principals were not provided with guidelines, either on a per pupil basis or in terms of a lump sum. These estimates were reviewed by the Superintendent who incorporated them in the System budget after making amendments he considered necessary. Board approval was given in April. One principal recalled that it took a long time to convince the Board of the value of the procedure.

Schools were also involved to a greater degree than ever before in the requisitioning of items included in the budget. The Secretary-Treasurer recalled, however, that strict control was not exercised in respect to adherence to the budget. Amounts allocated in the various categories were entered on control cards but the primary criterion of control was that schools did not exceed their total allocations. The approval of the Superintendent was required for all requisitions.

No formal in-service activity was conducted in the first year although PAB procedures were discussed at several meetings with principals. No budget handbook or statement of policy was prepared.

Staff input in the preparation of school budgets was provided at staff meetings (two instances) where needs and priorities were identified and through the completion of budget forms (one instance). The Superintendent, however, perceived staff involvement to be relatively low in the first year of implementation. The change required increased secretarial time in the purchasing and book-keeping functions. Assistant principals coordinated the process at the composite high school and in one elementary-junior high while the principals retained this responsibility in the other elementary-junior high and elementary school.

Stabilizing the Change

The adoption of a formal statement of policy and procedure for 1977 suggests that the change has now entered a stabilization phase.

A number of changes have taken place since 1974 in response to a variety of concerns. Each school budget was prepared in 1975 using the total school expenditure for 1974 as the major guideline.

Budget estimates were reviewed by the Superintendent and then submitted to the Board which established a total allocation by school. Principals then resubmitted budgets to conform to the Board figure. The same degree of operational flexibility was maintained. A major change in 1976 was the introduction of a measure of equity, with the Board approving a per pupil allocation for each type of school rather than a total allocation. Details of this procedure and the changes proposed for 1977 are set out following a review of problems of implementation.

Problems of Implementation

The Superintendent, the Secretary-Treasurer, and the three principals with experience since 1973 were asked to identify problems encountered in the first year of operation of decentralized school budgeting.

Problems encountered by trustees. The Superintendent reported few concerns among trustees once the procedures had been implemented. He recalled that the new Board was more concerned with the total system budget than with the details of individual school budgets.

Problems encountered at central office. The problems reported by the Superintendent in encountering initial resistance from the Board and principals were described earlier in this report. Once in operation, he perceived his main problems to be concerned with PAB classifications and the difficulties experienced by principals in correctly coding requisitions. The Secretary-Treasurer reiterated the Superintendent's concern with PAB. Two principals recalled the time spent by the Superintendent in organizing the change and training his staff, while the third recognized the problem of gaining Board acceptance of procedures.

All respondents recalled the Secretary-Treasurer and his staff encountering problems with the PAB requirements. One principal referred to the lack of training and experience in this area. Another principal recalled the difficulties experienced at central office with incomplete purchase orders submitted by principals and in communicating expenditures to schools. Apart from the initial trustee resistance encountered by the Superintendent, the problems at central office were thus largely associated with the administration of school budgets.

Problems encountered in schools. All respondents referred to difficulties encountered with PAB coding. The Superintendent felt that this stemmed in part from the fact that school secretaries were making the judgments on codes for requisitions.

One principal indicated that his school used up the funds in its budget by November because of a misunderstanding in respect to the period of time covered by the first budget. The late approval of budgets by the Board resulted in a school expectation that budgets covered the April-December period rather than the January-December period. The Board provided additional funds in these circumstances. Another principal referred to the delay in reporting by central office resulting in the schools not being aware of the state of their accounts. The problem of inflation resulted frequently in a large difference between estimated and actual costs.

Apart from the difficulties experienced in the school which required additional funding, the only problem reported among teachers concerned feelings of jealousy in one school where some teachers expended more funds than others.

One principal indicated that the need to justify each item in the school budget constituted a problem. Apart from this, however, all problems encountered at the school level concerned the administration of budgets.

CURRENT BUDGET PRACTICE

Preparation of Budgets

This section of the report provides details of the procedures employed to prepare the 1977 budget. Reference will be made to the manner in which these differ from those of previous years. Information for this section was provided by the Superintendent, Secretary-Treasurer, and all principals in the system. The preparation process is analyzed from the perspectives of time, task, and personnel at each of the central office, school, and Board levels.

Central office. Three budget forms were distributed by the Secretary-Treasurer early in the fall. One listed the PAB classifications which are decentralized and served as the budget form for each school. Another was for distribution to teachers to facilitate the preparation process at the school level. The third was for a listing of priorized capital expenditure items which are not part of the decentralized budget but which represent a statement of the school's perceived needs in the areas concerned. Schools were also given a statement of their expenditure patterns over the previous three years. For 1977 they were also given an estimated per pupil allocation. This was the 1976 figure of $60 per elementary pupil, $66 per junior high pupil, and $78 per senior high pupil with the addition of an eight per cent inflation factor. The proposed policy stated that these allotments will follow a weighting of 1.0 for elementary, 1.1 for junior high, and 1.3 for senior high with adjustments made as similar weightings in the School Foundation Grant Regulations change. The school for the mentally retarded is allocated an amount determined by the formula 2.5(Number of students x Elementary per pupil allocation) + $1000. Schools with fewer than 200 students receive a supplement of $5.00 per student. School fees are levied on a fixed scale to cover costs of materials and text rentals.

Schools were asked to submit budgets prior to December 15. These were reviewed by the Superintendent and Secretary-Treasurer and forwarded to the Board. The Superintendent recommended changes at this point in some instances.

The Secretary-Treasurer completed a review of revenue in December and January thus permitting the Superintendent to recommend a specific per pupil allocation to the Board.

The Superintendent was not asked to give his perception of the effect of decentralization on the amount of time he spent on preparation of budgets since the change was made in the first year of his appointment. The Secretary-Treasurer reported that he spent less time on the preparation of school and system budgets as a result of decentralization.

The Board. The Board reviewed the budget of each school in February and was able to disapprove any item. It determined the per pupil allocation on the recommendation of the Superintendent.

The budgets were then returned to schools for any amendments required in the light of Board deletions and the per pupil allocation. The amended budgets were then resubmitted for final adoption by the Board.

School. The policy statement under consideration at the time of the study encouraged staff participation in budgeting:

> In developing a school's mini-budget and spending of funds the principal is expected to consult with the teaching staff and, if necessary, the Superintendent and the Chief Deputy Superintendent. The principal must develop means and procedures to ensure that final decisions are arrived at in a collegial manner such as to accurately reflect a school's expression of its priorities.

All principals reported staff involvement in the preparation of budgets. This was usually accomplished by the distribution of forms at the October or November staff meetings and requesting that these be completed and returned. One principal indicated that he obtains verbal information only from teachers at this point. The principal of the school for the mentally retarded works closely but more informally with the two other teachers and one teachers' aide. The Superintendent perceived that teacher involvement was quite extensive compared to the minimal levels in the first year of involvement.

Teacher requests were consolidated by the principal in each instance except at one elementary-junior high where an assistant principal performs the task. No principal felt constrained to keep estimates within a fixed limit at this point since the opportunity to make reductions would come after the first review of the Board. Two principals reported a close adherence to expenditure patterns of the past while a third reported the use of specific allocations for each subject developed as a guideline on a year-to-year basis within his school. Each school principal attends the budget meetings of the Board and answers questions as required.

The principal of the early childhood program was not required to submit a budget but provided the Chief Deputy Superintendent with a detailed statement of needs within particular categories of the budget. She does not consider budgeting for her program to be decentralized as the term is defined in this study and for the School District. The Chief Deputy Superintendent prepares the budget for early childhood services.

The principal of the composite high school is required to submit budgets for three aspects of school operations: (1) academic, (2) vocational, and (3) the program for junior high schools conducted in what is termed the "complex" at the school.

Principals were asked to indicate their perceptions of the effect of decentralized school budgeting on the amount of time spent by school personnel on the preparation of budgets. Most reported that there had been an increase in time except for principals working with central office personnel on allocations. The results are summarized in Table 34.

Administration of Budgets

This section provides information on the procedures employed in the administration of the 1976 budget and the changes proposed for

Table 34

Principals' Perceptions of Effect of Decentralization on Time Spent by School Personnel on Preparation of Budget in Camrose

Persons	Perceived Effect of Decentralization			
	More Time	Same Time	Less Time	Not Applicable
Principal				
By self	3	0	0	0
With school personnel	2	1	0	0
With central office personnel	0	3	0	0
Other school personnel				
Assistant Principals	1	1	0	1
Department Heads	0	1	0	2
Teachers	2	1	0	0
Secretaries/Aides	3	0	0	0

1977 in respect to transfer, carrying forward, puchasing, control, and reporting.

Transfers. No transfers were actually made between the various PAB accounts. The high degree of operational flexibility described in the questionnaire response was achieved by overspending and underspending as the need arose during the year.

Two major changes are proposed for 1977. The proposed statement of policy provides that "no transfers in or out of any PAB category . . . . exceeding 15% of the approved amount shall be permitted except by written permission of the Superintendent of Schools." Another constraint to be implemented in 1977 provides that transfers cannot be made from funds appropriated for the "complex" or vocational programs at the composite high school without written authorization of the Superintendent.

The changes in procedure were made in response to problems which arose in 1976. These are outlined in the next section of the report.

Carrying a surplus or a deficit. Schools were permitted to carry forward a surplus in their 1976 budgets and were required to carry a deficit. These procedures were not employed in previous years. A change in procedure for 1977 confirms the arrangement for a surplus but expressly forbids a school from exceeding its budget. This change also reflects problems experienced in 1976.

Purchasing. Schools submit requisitions signed by the principal for expenditures from their budgets. These required the approval of the Superintendent until 1976 when the task was assigned to an accounts payable clerk at central office. This person consults the Superintendent when a school approaches an overspending situation or when guidelines appear to be violated.

Principals were asked to indicate their perceptions of the effect of decentralized school budgeting on the amount of time spent by school personnel on purchasing. The responses, summarized in Table 35, indicate that certificated employees spent the same or more time while non-certificated employees were all seen to spend more time.

Table 35

Principals' Perceptions of Effect of Decentralization on Time Spent by School Personnel on Purchasing in Camrose

	Perceived Effect of Decentralization			
Persons	More Time	Same Time	Less Time	Not Applicable
Principal	2	1	0	0
Assistant Principals	1	1	0	1
Department Heads	0	1	0	2
Teachers	1	2	0	0
Secretaries/Aides	3	0	0	0

Control. Apart from the transfer and purchasing procedures described above, control is facilitated at the central office level by entries on PAB control cards and, at the school level, by records maintained by a secretary or a teachers' aide. Three principals indicated that these records consisted of a set of files while the other two described a more formal book-keeping practice. Three sets of records were maintained at the composite high school in 1976, one for the "complex" maintained by the head of that program, the others for the remaining part of the school operation maintained by a teachers' aide. All records will be maintained by the teachers' aide in 1977.

Two of the three principals reported that they spent more time on record-keeping as a result of decentralization. All perceived that secretaries devoted more time to this task. Except for the Department Head who kept records in the "complex" of the composite high school who spent more time, all other certificated teachers were not involved in record-keeping and were thus seen to spend the same amount of time on this task.

Financial reports. Financial reports were given to schools in June and October 1976. These indicated the total amount unexpended at these times. The Superintendent indicated that schools were invited to visit central office at any time to examine PAB control cards.

Four of the five principals indicated that these reports were several months behind requisitions and did not indicate the amounts encumbered. The proposed statement of policy provides for more frequent reports in 1977 on specified dates in March, June, and October.

The Superintendent was not asked to indicate his perception of the effect of decentralization on the amount of time he spent on the administration of budgets since the change was introduced in the first year of his appointment. The Secretary-Treasurer indicated that he spent more time on the administration of school and system budgets as a result of decentralization.

Current Problems in Budgeting

All respondents were asked to recall problems encountered over a twelve month period which included the administration of the 1976 budget and the preparation of the 1977 budget.

Problems encountered by trustees. The Superintendent was not aware of any problems encountered by trustees in the preparation and administration of school budgets.

Problems encountered at central office. The major problem reported by the Superintendent concerned the transfer of funds and the accumulation of a large deficit at the composite high school. The principal of this school permitted the deficit to accumulate believing that it was "covered" by a roughly equal amount of school-generated money paid into general revenue for the system. This situation also involved the transfer of the same amount of money between two accounts in the school budget. The Superintendent indicated that the procedures had no foundation in policy or procedure. The situation has been resolved in 1977 by an allocation to the school in lieu of the school-generated funds which will be paid into general revenue as before, and by constraining transfers and the accumulation of a deficit in the manner described in the previous section of this report.

The second problem reported by the Superintendent also related to deficits and under and overexpenditure in school accounts. He believed that principals should become more aware of the state of their accounts and generally monitor the administration of the budget more closely. The new procedures for 1977 reflect these concerns.

Three principals did not see the Superintendent encountering problems with decentralized school budgeting. One believed the Superintendent to be concerned at the overexpenditure described above while another saw the Superintendent and his staff encountering problems as a result of different interpretations among system personnel on the definitions of PAB categories.

The Secretary-Treasurer described his problems and those of his staff in terms of the consequences of the difficulties reported by the Superintendent and the principals, especially those involving purchasing and accounting.

The problems encountered at central office all fell in the administration phase of the budgeting process. In this respect the situation is largely unchanged from that reported for the first year of implementation of the practice.

Problems encountered in schools. The responses summarized in Table 36 indicate most problems encountered by principals are associated with the administration of budgets. The major problems are associated with the procedures for requisitioning and purchasing.

Apart from the consequences of the problems reported for principals, only one principal described a problem encountered by teachers and this concerned the need to orient new members of staff to the budgeting procedures. One principal referred to the amount of time required for the secretary to perform her duties associated with budgeting.

Table 36

Current Problems Encountered by Principals in Camrose

Stage in Budgeting Process	Description of Problem	Frequency Central Office (N = 2)	 Principals (N = 5)
Preparation	Allocation:		
	(1) loss of school-generated funds to general revenue	0	1
	(2) failing to allocate in areas of need	0	1
Administration	Purchasing: delays, returned items, coding	1	3
	Accounting: difficulties	1	1
	Reporting: adequacy and frequency	0	2

Disagreements

Superintendent. The Superintendent indicated that he was never involved in disagreements with trustees on matters related to school budgeting. He described his disagreements with the Secretary-Treasurer as "occasional," concerning the frequency of reports to schools and delays in the preparation of financial statements and estimates. His disagreements with principals were "seldom" and typically concerned funds which should be included in mini-budgets. He cited the example of the allocation of school-generated funds and another involving a disagreement on whether the costs of a particular piece of equipment should be included in a mini-budget or should be met from a centralized fund. The Superintendent reported no disagreements with other system personnel.

The Superintendent was not asked to assess the effect of decentralization on the frequency and severity of disagreements since the change was made in the first year of his appointment.

Principals. Principals with at least one year of experience with the practice were asked to give their perceptions of the frequency of their disagreements with the Superintendent, the Secretary-Treasurer or members of his staff, teachers, secretaries, and other persons with special roles in budgeting. The three principals with experience of centralized and decentralized budgeting assessed the effect of decentralization on the frequency and severity of disagreements. The responses are summarized in Table 37.

Most principals described their differences with central office personnel and teachers as "seldom" or "occasional" and with

Table 37

Principals' Perceptions of Frequency and Severity of Disagreements in Camrose

	Frequency of Disagreements				Perceived Effect of Decentralization[a]					
					Frequency			Severity		
Persons in Disagreement	Often	Occasionally	Seldom	Never	Less	More	Same	Less	More	Same
Principal and Superintendent	0	1	2	1	2	0	1	2	0	1
Principal and other Central Office	0	2	1	1	1	1	1	1	0	2
Principal and Teachers	0	2	2	0	1	1	1	1	0	2
Principal and Secretary/Aide	0	0	1	3	0	0	3	0	0	3
Principal and Department Head[b]	0	0	1	0	0	0	1	0	0	1

[a] N=3 for this item.

[b] In school where one department head had major responsibility in budgeting.

secretaries as "never." Examples of disagreements with the Superintendent were related to dates for submission of budgets and deadlines for purchasing, the nature of equipment to be purchased by a school, and the items which are included in a school budget. The three principals reporting disagreements with other central office personnel referred to differences in interpretation of PAB classifications with one also referring to accuracy of accounts and another describing delays in processing requisitions.

Three of the four principals describing disagreements with teachers referred to differences related to items which should be purchased (need, quality, inclusion in budget) while the fourth described major disagreement over the transfer of funds within the school. No examples were cited of disagreements with other school personnel.

Most principals considered that decentralization had either reduced or had no effect on the frequency and the severity of disagreements related to school budgeting. One principal reported an increased frequency of disagreements with teachers and central office staff other than the superintendent. He felt this was understandable since budget matters are now discussed more frequently at these levels. Another principal reported an initial increase in disagreements between all levels which subsided as system personnel became more familiar with procedures.

OBJECTIVES AND OUTCOMES

Objectives

Formal objectives. No formal objectives have been prepared for decentralized school budgeting in this system. The statement of policy cited earlier in this report outlines the procedures employed to implement the practice although the directive that "there shall be a fair distribution of District money to all schools" in the statement implies an objective of equity in resource allocation.

Perceptions of respondents. The Superintendent and the three principals with experience since the practice was adopted were asked to give their perceptions by indicating the value placed on each of eight objectives included in the schedule. Table 38 contains a summary of responses together with perceptions of the progress which had been made toward the attainment of objectives.

The Superintendent considered all objectives to have high value (evaluated as "much" or "great"). Principals generally valued highly (using the criterion of "much" or "great" value seen by at least two of the three respondents) all objectives with the exception of that related to the encouragement of innovation. Apart from the exception, there would appear to be no important differences between the Superintendent and the principals in respect to their perceptions of the objectives of decentralized school budgeting.

Outcomes

The Superintendent saw a high degree of progress (evaluated as "much" or "great") for all objectives except those related to the

Table 38

Objectives of Decentralized School Budgeting in Camrose: Perceived Value and Progress

Objective	Criterion	Evaluation of Principals (N=3) and Superintendent[a]				
		None	Little	Some	Much	Great
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	0	1	2(1)
	Progress	0	0	0	3(1)	0
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	0	1(1)	2
	Progress	0	0	0	3(1)	0
3. To provide a more equitable allocation of funds among schools	Value	0	0	0	0	3(1)
	Progress	0	0	0	0(1)	3
4. To obtain more efficient use of funds allocated to each school	Value	0	0	0	1	2(1)
	Progress	0	0	1(1)	1	1
5. To provide schools with greater flexibility in the development of the instructional program	Value	0	0	1	0	2(1)
	Progress	0	1	0	1(1)	1
6. To encourage school and teacher innovativeness	Value	0	0	2	1(1)	0
	Progress	0	1(1)	2	0	0
7. To reduce the time required to meet changing school needs	Value	0	1	0	1	1(1)
	Progress	0	1	1	1	0(1)
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Value	0	0	0	1(1)	2
	Progress	0	0(1)	3	0	0

[a] Superintendent's responses are shown in parentheses.

efficient use of funds, innovativeness, and cost awareness. The responses suggest that he saw a need for more progress for each of these exceptions, although he stressed that "principals have not wasted money--there hasn't been a foolish expenditure . . . ."

Principals saw a high degree of progress (evaluated as "much" or "great") for each of the highly valued objectives except those related to the reduction of time required to meet changing school needs and cost awareness.

The differences between the Superintendent and the three principals responding to these items are summarized in Table 39. The important difference lies in their differing perspectives of the extent to which decentralized school budgeting has reduced the time required to meet changing school needs. Several principals elaborated by referring to the delays in the purchasing process.

SUGGESTIONS FOR CHANGE

The Superintendent and the five principals were asked to indicate changes they would like to see in school budgeting practice in the District. Respondents were asked to consider the procedures proposed for 1977 as a statement of current practice. The responses are summarized in Table 40.

Superintendent

The Superintendent preferred to see a higher degree of authority to make allocations at the school level. The major area of change he proposed was that of staffing. He indicated that this had been raised at a meeting of principals but the reaction was negative.

Table 39

Outcomes for Highly Valued Objectives in Camrose

Objective	Superintendent's Evaluation		Principals' Evaluation	
	High Value	High Progress	High Value	High Progress
1. To provide the principal with an approrole in the decision-making process for the allocation of funds	Yes	Yes	Yes	Yes
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Yes	Yes	Yes	Yes
3. To provide a more equitable allocation of funds among schools	Yes	Yes	Yes	Yes
4. To obtain more efficient use of funds allocated to each school	Yes	No	Yes	Yes
5. To provide schools with greater flexibility in the development of the instructional program	Yes	Yes	Yes	Yes
6. To encourage school and teacher innovativeness	Yes	No	No	No
7. To reduce the time required to meet changing school needs	Yes	Yes	Yes	No
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Yes	No	Yes	No

Table 40

Preferences for Change in Decentralized School Budgeting Practice in Camrose

	Desired Degree of Decentralization		
Area of Authority	More	Same	Less
School Budget Authority	1(1)[a]	4	0
Operational Flexibility	3	2(1)	0
Carry Surplus or Deficit	0	5(1)	0

[a] Superintendent's responses in parentheses.

The Superintendent did not prefer to see a change in respect to operational flexibility and the extent to which a school may carry a surplus or a deficit.

In five years' time, the Superintendent would like to see a decentralization of budget decisions for staffing, a development of PAB procedures to permit the calculation of program costs, and if the system population increases significantly, the use of computer technology in accounting and budgeting.

Principals

The changes preferred by principals differed from those identified by the Superintendent in two important respects. Four of the five principals preferred no change at all in the extent of their authority to make allocations, with each specifically identifying staffing as an area they would not wish to see decentralized. One principal specifically referred to the staffing area as one which he would prefer to be decentralized. A majority of principals would prefer more authority to transfer funds than is contained in the statement of procedures for 1977. All are satisfied with the policy for carrying forward a surplus or a deficit although two suggested that the reasons underlying a trend to deficit spending should be closely examined.

Two principals suggested additional changes with one identifying a need to re-examine the definitions of several PAB classifications while the other proposed more bulk purchasing and the employment of a purchasing agent to reduce costs and make more funds available to schools.

GENERAL EVALUATION

The Superintendent was "moderately satisfied" with decentralized school budgeting in the system at the time of the study. Three principals indicated that they were also "moderately satisfied" while two reported they were "highly satisfied." These responses suggest there are no important differences between the extent of satisfaction of the Superintendent and the principals.

FURTHER DISCUSSION

The information contained in this chapter is examined further in Chapter 13, where it is consolidated with that reported for other systems included in the second stage of the study. This comparative review, presented against the theoretical background of Chapter 2 and the review of literature in Chapter 3, is organized under the following headings:

Forces Influencing the Adoption of Decentralized School Budgeting.

Objectives of Decentralized School Budgeting.

Change Strategies.

Problems of Implementation.

Preparation and Administration of School Budgets.

Operational Problems.

Disagreements in Decentralized Budgeting.

Attainment of Objectives.

Preferences for Change.

Satisfaction with Decentralized School Budgeting.

Chapter 8

FOOTHILLS SCHOOL DIVISION

Foothills School Division lies to the south of the City of Calgary in Southern Alberta. Its 1,584 square miles contain a variety of industry and terrain from the farmland of the western prairies and the town of High River to the rolling foothills and the towns of Turner Valley and Black Diamond, each centres of ~~a~~ long-established oil industry. Its northern limits contain the town of Okotoks which has become a rapidly-growing suburb of Calgary some seventeen miles to the north.

The Division operates fifteen schools, the furthest of which is thirty-five miles from the central office in High River. The student enrolment on September 30, 1976, was 3,860. The rapid growth of the school system is reflected in the enrolment increase of 68.7 per cent for 1965-74 compared to a provincial mean increase of 15.5 per cent for the same period. Growth in the town of Okotoks suggests that these trends shall continue.

Administration

The Division is administered by the Superintendent, who is designated Chief Executive Officer, the Assistant Superintendent of Curriculum and Instruction, the Assistant Superintendent of Pupil Personnel, the Supervisor of Instructional Media (0.5 FTE), and the Secretary-Treasurer, who supervises the non-certificated personnel in the Division.

All central office administrators, along with the Secretary-Treasurer, have responsibilities in the preparation of the system budget, which is presented to the Board by the Superintendent. However, that part of the budget which is decentralized to schools, termed the "mini-budget" allocation in the Division, is exclusively the responsibility of the Superintendent during the preparation phase. The Purchasing Agent, who is a member of the Secretary-Treasurer's staff, has the major central office responsibility in the administration of the mini-budgets. These roles are elaborated later in this chapter.

Collection of Data

Decentralized school budgeting was implemented in the Division in 1970. Among those currently serving, no person with a direct role in school budgeting at central office and only two principals held these positions for at least one year before and one year after the adoption of the change. This sharply reduced the number of persons in the system who could provide information on the change process itself. The procedures for data collection in this system differed in several ways from those employed in other systems in order to accommodate these circumstances.

Information on the change process was provided by the former superintendent, now employed by the Department of Education, and the two persons who were principals for one year before and one year after the change. Minutes of the Board and an evaluative report prepared by Department of Education were also examined. Questions seeking perceptions of the effect of decentralized school budgeting on:

(1) the time spent on preparation of budgets, purchasing, and bookkeeping, and (2) the frequency and severity of disagreements, were deleted from the schedule because of the small number of respondents and the period of time which has elapsed since the change.

Information on current practice was provided by the present Superintendent, who was appointed in 1971, the Secretary-Treasurer, the Purchasing Agent, and a stratified random sample of six principals with at least one year of experience in the principalship in the Division. Three one- or two-room schools on Hutterite Colonies were not included in the list furnished by the Superintendent and were not part of the group sampled. The sample of six included the two principals who provided information on the adoption of the change. Table 41 summarizes the nature of the sample.

Table 41

Selection of Division Principals for Interview

Level	Number of Schools	Principals since at least 1975-76	Selected for Interview
Elementary	3	3	2
Elementary-Junior High	9	6[a]	3
Junior-Senior High	3	2	1
Total	15	11	6

[a] Three Hutterite schools not included in list to be sampled.

Other information was obtained from the questionnaire completed by the Superintendent in the first stage of the study and statements of policy. Several school budgets were also examined.

Degree of Decentralized School Budgeting

The questionnaire completed by the Superintendent indicated a relatively high degree of decentralization on the School Budget Authority Scale, with school decisions made on allocations for eighteen of the twenty-seven items in the scale. The administration of the budget was moderately decentralized with schools having a high degree of discretion to make budget transfers within each of the services purchased, supplies, and capital outlay categories of their budgets. Schools were required to carry forward both a surplus and a deficit.

Questionnaire responses were consistent with statements of policy and the procedures observed in the system with the exception of some decisions on the School Budget Authority Scale which appeared to be sharply constrained by central office guidelines. Non-certificated staffing, transportation for field trips, and professional development activities were all shown in the questionnaire as being school decisions but none were included in budget estimates prepared by schools. School authority to allocate for these items was limited to: (1) determining the distribution of time between teachers' aides and secretaries from a total time allocation made to each school on a formula basis for these positions, (2) a maximum number of miles available for field trips determined on a per pupil basis, with the school having discretion to obtain funds for in-school cultural activities in lieu of transportation, and (3) a lump-sum allocation for professional development activities which is made to the Alberta

Teachers' Association Local rather than the schools. The number of caretakers employed at each school was found to be a central office decision rather than a school decision.

The degree of decentralization on the School Budget Authority Scale appeared to be somewhat less than that suggested by the questionnaire responses although still within the top quartile for school systems in Alberta.

Decentralization Policy

Decentralized school budgeting is recognized in the Policy Handbook for the School Division. This policy is revised annually to include the amount of the lump-sum available to schools, expressed as a per pupil allotment, and a list of the items which are to be included and excluded in the budget prepared by the principal. It specifies that all schools must "submit to the Superintendent of Schools by February 1 a breakdown on how the mini-budget will be allocated or spent." The various operating procedures are set out later in this chapter.

The Superintendent indicated that decentralized school budgeting was part of a trend in decentralization in the Division. Principals have recently acquired more authority in: (1) the supervision of staff, including the hiring and dismissal of teachers' aides and involvement in the selection of teachers, and (2) the approval of field trips.

CHANGE PROCESS

This section considers the adoption of decentralized school budgeting in 1970. The change process can be outlined in general terms only because of the limited number of persons who could provide information and the difficulty experienced by respondents in recalling details.

Budgeting Practice Before Decentralization

Details of budget practice before decentralization were provided by the former Superintendent. No funds were allocated for school budgets at the time of his appointment in 1967. Each school received a basic allocation of instructional supplies but equipment and other resources could be acquired only by submitting a special request to central office. He found a great disparity between schools in respect to the amount of equipment and, beginning in 1968-69, secured Board approval to extend the "scale of issue" to equipment in order to achieve a degree of equity in the system.

Budget practice in the Division prior to 1970 was thus highly centralized with a standardized issue of instructional supplies and equipment. Schools were not involved in the preparation of budget estimates.

Recognition of a Need for Change

Recollections of the factors underlying the adoption of the practice were provided by the former Superintendent and two persons who had served as principals for one year prior to the change. The present Superintendent, appointed 1 March, 1971, was asked to outline his understanding of the factors. Board minutes were also consulted.

Internal factors. The former Superintendent recalled that budget procedures prior to 1970 did not reflect school priorities and needs. He recommended to the Board that a lump-sum be allocated to schools to overcome the problem. The initiative of the Superintendent was confirmed by one of the principals while the other recalled concerns expressed at meetings of the Principals' Association that: (1) there should be a fairer allocation of funds, and (2) schools should be involved in the allocation process.

One principal described the reorganization of central office staff which had occurred at the time of decentralization. The present Superintendent, familiar with the circumstances, referred to the rapid growth of the school system and the heavy burden of work at central office in keeping up with school requests for supplies and equipment. Other related changes at this time were the appointment of a Purchasing Agent to assist the Secretary-Treasurer and the designation of the Superintendent as Chief Executive Officer of the School Division.

External factors. The former Superintendent indicated that no external factors influenced the adoption of decentralized school budgeting,which was not a general practice at that time. He had no model for the procedures he proposed to the Board. One principal considered that there was the increased consciousness of costs and a movement toward "accountability" at the time. The rapid growth of the number of students, considered an external demographic condition in the framework for analysis, had the effect at central office described above.

Decision. It appears that two factors contributed to the adoption of the practice. The first was the realization by the Superintendent and school principals that existing methods for resource allocation were not meeting the needs of schools in the division. This problem was accentuated by the second factor; namely, the rapid growth of the system and the difficulty experienced by the Secretary-Treasurer and his staff in meeting the increasing number of requests for supplies and equipment.

The initiative for change was taken by the Superintendent who raised the proposal at a meeting of the Principals' Association. The support of principals was given. The Board approved the change on Feburary 10, 1970. Other changes related to the perceived need to develop alternative structures in central office were also made in early 1970 including the appointment of a Purchasing Agent.

Planning the Change

No distinct planning phase was identified in the interviews. A period of time elapsed while the amounts of money to be included in the decentralized budgets were determined. The Board gave approval on June 3, 1970, to a per pupil allowance of $25 for items in the decentralized accounts, in addition to standard allocations for Industrial Arts, Home Economics and other options at the junior and senior high level. These funds were to cover expenditure in the 1970 fiscal year.

Implementing the Change

No formal in-service activities were conducted to acquaint school and central office personnel with procedures related to the practice although both principals interviewed recalled discussions at meetings of the Principals' Association.

The changes in role in preparing estimates were not accompanied by changes in personnel or in organizational structure at either central office or in the schools. The appointment of a Purchasing Agent as part of the larger reorganization of central office facilitated the change since an increased number of requisitions was expected.

The former Superintendent recalled that he encouraged principals at meetings of the Principals' Association to involve staff in determining the allocation of funds. No information was available on the extent of staff involvement.

Stabilizing the Change

The procedures of decentralized school budgeting have remained largely without change since 1970 although changes in accounting practice were implemented in 1971. It would appear that the change quickly became a routine aspect of the annual budgeting process in the School Division.

Problems of Implementation

The former Superintendent and the two principals at the time were asked to recall problems encountered in the first year of implementation.

Problems encountered by trustees. The former Superintendent indicated that trustees were concerned at the end of 1970 that actual school expenditures in the decentralized accounts differed in a major way from those included in the estimates forwarded to the Department of Education in early 1970. He indicated, however, that he was able to reassure them on this issue.

Problems encountered at central office. The former Superintendent could recall no difficulties from a personal standpoint. The two principals interviewed in this regard also could not recall difficulties experienced by the Superintendent.

The former Superintendent indicated that the accounting system at central office was not able to keep pace with the purchasing, and lengthy delays meant that principals were not kept aware of how much they had left in their accounts. One principal also referred to problems with the purchasing procedures in central office. These two concerns were included among problems examined by two officers of the Department of Education at the request of the School Division. The report prepared following the examination noted that, in respect to purchasing, "the bulk of the problems seem to lie with mini-budgeting systems in operation in the School Division." The report recommended procedures for improved accounting and purchasing.

One principal recalled this to be a period of adjustment at central office where staff had been accustomed to more control over school allocations. He referred, in particular, to the concern of the Secretary-Treasurer.

Problems encountered by schools. The former Superintendent recalled frequent disagreements between principals and central office personnel over matters related to purchases and the amount of money remaining in their accounts. He indicated that this resulted in schools setting up their own system of books.

One principal referred to the increased work load for principals resulting from the implementation of the change. Many principals were also full-time teachers at that time. The other principal recalled difficulties in determining how the money was to be allocated. He indicated that no system guidelines were provided to assist principals in this task. He also recalled that teachers experienced the same difficulty.

The problems described by respondents, except for principals' perceptions of their own role, were all concerned with the administration of the budget rather than the preparation phase.

CURRENT BUDGET PRACTICE

Preparation of the Budget

This section provides details of the procedures employed to prepare the 1976 and 1977 budgets. Information was provided by the Superintendent and six principals. The preparation process is analyzed from the perspectives of time, task, and personnel at each of the central office, Board, and school levels.

Central office. The Superintendent is the only central office administrator involved in matters related to the mini-budgets. He recommended to the Board the amount to be allocated on a per pupil basis and prepared the guidelines for schools to use in preparing their budgets. The allocation is normally established by the Board early in the calendar year with school budgets submitted to the Superintendent by February 1.

The 1976 allocations in the mini-budget were scaled according to the size of the school, with $32.00 per student in schools with fewer than 200 pupils, $29.50 per student for schools in the range 200-399 pupils, and $26.50 per student for schools with more than 400 pupils. There was no increase in these allocations for 1977 due to an accumulated system deficit of approximately $500,000 although an additional payment of $5 was made for each student at the senior high level. There was also no change in the mini-budgets from 1974 to 1975 due to the defeat in a plebiscite of a proposal to increase local tax revenue beyond the limit provided in Regulations of the Minister under Section 119 of *The School Act.*

The allotment to schools in the mini-budget is used for the purchase of equipment and supplies. Principals are also required to submit a statement of needs requiring capital outlay for the purchase of furniture, improvements to school grounds, structural alterations to buildings, and large items of equipment. The classifications of the PAB system are not used in school budgeting and no standard forms are prepared for estimates of proposed expenditure in mini-budgets.

The Superintendent receives the mini-budget allocations from the schools. No Board approval is required. The Superintendent indicated that he reviews each budget to ensure that all areas have been met but rarely recommends changes. He prepares a recommendation to the Board for the list of capital items submitted by schools. Capital items not approved by the Superintendent or Board may be purchased from mini-budgets if funds are available.

The Superintendent indicated that the major changes which have been made in these procedures since 1971 have been the introduction of the scaling factor to reflect different school size and the specification of categories to be included and excluded.

Board. The Board established the amount of the per pupil allocation after receiving the recommendation of the Superintendent. It does not consider the subsequent allocations made by each school but receives a recommendation from the Superintendent in respect to requests for capital expenditure.

School. No policy has been established in respect to the involvement of staff in the preparation of school budgets. The Superintendent advised that the responsibility lies with the principal and there is no expectation that teachers be involved.

Only one principal reported a systematic procedure for the involvement of teachers. The principal of a junior-senior high school indicated that a budget committee composed of one representative from each subject area, in addition to the principal, established the budget after receiving a list of priorized needs from each area. The budget is submitted to the total staff for formal adoption. Other principals reported varying degrees of staff input ranging from an invitation to teachers to indicate needs on an informal basis to staff meetings where the budget is a major item. In these instances the allocations were determined by the principal.

No standard form was used to submit a statement of allocations to the Superintendent. An examination of school budgets for 1976 revealed that all were prepared in simple, line-item form on a single sheet of paper with broad categories such as "supplies—$3,500," "mathematics—$100," and "petty cash—$100."

Four of the principals indicated that the Superintendent did not discuss the allocations or make recommendations for change. Two principals recalled circumstances where the Superintendent had suggested a change with one specifying requests made by the school for an item to be included in the centralized capital outlay submission when it should have been included in the mini-budget.

Administration of Budgets

This section provides information on the procedures employed in the administration of the 1976 budget in respect to transfer, carrying forward, purchasing, control, and reporting.

Transfers. No transfers were formally made within the classifications set out in the budget statements prepared at each school. The Superintendent indicated that any expenditures within the objects included in mini-budgets may be made. All principals indicated that expenditure were made during the year according to need. One principal recalled an occasion the approval of the Superintendent was sought when a decision was made to substantially increase expenditure in the library. The principal in a school which kept separate accounts for each subject area reported that operational flexibility was achieved by overspending and underspending in the various accounts as the need arose and that transfers were then made between accounts at the end of the year.

Carrying a surplus or a deficit. The Superintendent indicated that schools were required to carry a surplus and a deficit to the following year. Several of the principals interviewed reported the carrying of a surplus of up to thirty per cent of their total allocations. Only one reported a deficit. One principal indicated that a surplus was carried to permit the accumulation of funds for new equipment when an addition to the building was completed.

Purchasing. A combination requisition and purchase order form has been prepared for use in the Division. These are completed at the school, signed by the principal, and forwarded to central office where the authorization of the Purchasing Agent is required. The Superintendent is not usually involved in the approval of requisitions.

Control. Control at the central office level is achieved through the scrutiny of requisitions by the Purchasing Agent. The primary focus of his attention is whether the expenditure is requested from the school mini-budget account or from the centralized capital account. Instances were cited of principals seeking to expend funds from the latter when they should be from the former. Differences are resolved by discussion with the principal.

Control at the school level is achieved through the formal requisitioning procedure and estimates of the balance in the school mini-budget. Only two principals reported that a set of books were kept at the school. One indicated that he personally performed this task while the other, the principal at the junior-senior high, described books maintained by the school secretary which conformed to standard accounting practice and included separate accounts for each subject area. Four principals reported that they relied on the monthly report from central office as a basis for estimating the school's financial status.

Reporting. A monthly statement is forwarded from central office along with copies of invoices which have been received. The reliance of schools on these reports was described above.

Current Problems in Budgeting

All respondents were asked to recall problems encountered over a twelve month period which included the administration of the 1976 budget and the preparation of the 1977 budget.

Problems encountered by trustees. No problems encountered by trustees were identified during interviews. This is consistent with their lack of involvement in the preparation and administration of mini-budget except for determining the per pupil allocation.

Problems encountered at central office. The Superintendent reported a number of personal concerns related to the amount of the allocations to schools and the budget preparation process. He felt that the 1976 per pupil allocation was insufficient especially for senior high schools and schools in high growth areas. He indicated that principals occasionally overlook areas of need within their mini-budgets and in capital outlay submissions. He reported that there had been disagreements with principals on whether an item should be included in the mini-budget or as a capital request.

One principal perceived the Superintendent to encounter problems with principals who want to spend more than they are allocated while another saw him as experiencing difficulty in persuading the Board to increase the amount of the allocation. A third principal described a continuing concern in the Division related to the purchase of textbooks for rental to students. These were formerly included in the mini-budget but were recently excluded. Three principals did not perceive the Superintendent to encounter problems with decentralized school budgeting.

The major problem faced by the Purchasing Agent is derived from the practice of some principals of billing to capital outlay what should be a mini-budget expenditure. This problem was identified by the Superintendent, Secretary-Treasurer, Purchasing Agent, and two of the principals. The Secretary-Treasurer and Purchasing Agent also referred to problems created by schools which overspent their budgets and delays in reporting expenditure.

Problems encountered in schools. The responses summarized in Table 42 indicate that the most frequently reported problems concern the amount of the per student allocation in the mini-budget (three respondents) and the related problem of principals seeking to include items in the centralized capital outlay budget rather than the mini-budget (two respondents).

Few problems encountered by teachers were identified. The

Table 42

Current Problems Encountered by School Personnel in Division

Person Experiencing Problem	Stage in Budgeting Process	Description of Problem	Frequency	
			Central Office (N = 3)	Principal (N = 6)
Principals	Preparation	Role: some principals unable or unwilling to involve staff	1	0
		Allocation:		
		(1) insufficient funds in mini-budget	1	2
		(2) attempts to include items in capital budget	1	1
	Administration	Role: lack of knowledge of accounting procedures	0	1
		Reporting: delays in reporting expenditures	1	0
Teachers	Preparation	Allocation:		
		(1) insufficient funds in mini-budget	1	0
		(2) teachers' needs not met	1	0
	Administration	Purchasing: teachers' requests which cannot be approved	0	2

most frequently mentioned concern was requests by teachers for items which could not be provided with the available funds. No problems were reported for school secretaries.

Disagreements

Superintendent. The Superintendent described the frequency of his disagreements with the Board in determining the amount of the mini-budget allocation as "occasional." He indicated, in discussing the problems experienced by principals, his feeling that allocations should be increased. The Superintendent reported that he was never in disagreement with either trustees or other central office personnel on matters related to the administration of school budgets.

The Superintendent described the frequency of his disagreements with principals as "seldom." These disagreements typically concerned the issue of allocations to mini-budgets or capital outlay as recounted above.

Principals. The perceptions of principals of the frequency of their disagreements with system personnel are summarized in Table 43.

Table 43

Principals' Perceptions of Frequency of Disagreements in the Division

Persons in Disagreement	Frequency			
	Often	Occasionally	Seldom	Never
Principal and Superintendent	0	1	3	2
Principal and other Central Office	0	0	1	5
Principal and Teachers	0	0	2	4

Disagreements with the Superintendent all concerned capital outlay with two describing instances where requests had not been met and two referring to the issue of capital and mini-budget expenditure alluded to in several places in this report. The one instance of a disagreement with other central office personnel also concerned the latter.

One principal describing disagreements with teachers referred to differences in priorities for an item with the principal using the criterion "what is needed" rather than "what would be nice to have." The other principal reporting disagreements with teachers cited the example of requests for items when insufficient funds were available. No principal reported disagreements with secretaries.

OBJECTIVES AND OUTCOMES

Objectives

Formal objectives. The policy handbook contained no formal statements of the objectives of decentralized school budgeting. However a statement of purpose was included in the minutes of the Board meeting of February 10, 1970, approving the practice. This statement reflected the factors underlying the adoption of the practice as well as the expectations of the Board:

1. To develop greater responsibility in ordering by the school staffs.
2. To reduce central office labor.
3. To increase opportunity for individual schools to divert funds into their individual areas of need.

This policy referred to "purchases for schools" rather than "budgeting."

Perceptions of respondents. The Superintendent and the sample of six principals were asked to give their perceptions by indicating the value placed on each of eight objectives included in the schedule. Table 44 contains a summary of responses together with perceptions of the progress which had been made toward the attainment of objectives.

The Superintendent considered all objectives to have high value (evaluated as "much" or "great") with the exception of that related to cost awareness. Principals generally valued highly (using the criterion of "much" or "great" value seen by at least four of the six principals) all objectives. The responses suggest that, with the exception of that related to cost awareness, there are no important differences between the perceptions of the Superintendent and the principals. Of special interest is the unanimity in respect to the objectives concerned with equity and efficiency. No respondent perceived decentralized school budgeting as having an objective related to the reduction of the work-load at central office as suggested in the purposes recorded in the Board minutes cited above. The responses are otherwise consistent with those purposes.

Outcomes

The Superintendent considered (rated as "much" or "great") all objectives to have high value except that related to cost awareness. Using the same criterion, he saw a high degree of progress in attaining each of these except adaptability. The responses suggest that the Superintendent saw a need for more progress in reducing the time required to meet changing school needs.

Principals generally valued highly (using the criterion

Table 44

Objectives of Decentralized School Budgeting in Division: Perceived Value and Progress

Objective	Criterion	Evaluation of Principals (N=6) and Superintendent[a]				
		None	Little	Some	Much	Great
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	2	1	3(1)
	Progress	1	0	1	2(1)	2
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	1	0	5(1)
	Progress	1	0	0	4(1)	1
3. To provide a more equitable allocation of funds among schools	Value	0	0	0	0	6(1)
	Progress	1	0	1	1	3(1)
4. To obtain more efficient use of funds allocated to each school	Value	0	0	0	0	6(1)
	Progress	0	1	1	2	2(1)
5. To provide schools with greater flexibility in the development of the instructional program	Value	0	0	1	0(1)	5
	Progress	0	1	1	2(1)	2
6. To encourage school and teacher innovativeness	Value	0	0	0	1(1)	5
	Progress	1	0	2	2(1)	1
7. To reduce the time required to meet changing school needs	Value	0	0	0	2(1)	4
	Progress	0	0	1(1)	3	2
8. To examine and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Value	0	0	1(1)	0	5
	Progress	0	0	2(1)	2	2

[a] Superintendent's responses are shown in parentheses.

of "much" or "great" value seen by at least four of the six principals) all objectives. Using the same criterion, they saw a high degree of progress for all except that related to innovativeness. The perceptions of principals and the Superintendent thus differed with respect to the outcomes for innovativeness, adaptability, and cost awareness.

Two principals consistently rated progress as low ("none," "little," or "some"). These respondents indicated that progress was impaired because insufficient funds were included in the mini-budgets. One of these principals asserted that the funding was especially inadequate to meet the needs of his school which is located in a high-growth area. He drew attention to the defeat in 1975 of the plebiscite called to consider an increase in local tax revenue even though a supporting vote was carried in his area.

SUGGESTIONS FOR CHANGE

The Superintendent and principals were asked to indicate changes they would like to see in school budgeting practice in the School Division. The responses are summarized in Table 45.

Superintendent

The Superintendent suggested two major changes in proposing an increase in authority at the school level. He was cognizant of the difficulties experienced by principals in respect to meeting needs and favoured an increased allocation to meet this. He also expressed an interest in extending school authority to give discretion

Table 45

Preferences for Change in Decentralized School Budgeting Practice in Division

	Desired Degree of Decentralization		
Area of Authority	More	Same	Less
School Budget Authority	1(1)[a]	5	0
Operational Flexibility	0	6(1)	0
Carry Surplus or Deficit	0	5(1)	1

[a] Superintendent's responses in parentheses.

in the allocation of staff by permitting, for example, the exchange of the services of teachers and teachers' aides. He appreciated that this may have implications in collective bargaining and accounting practice.

The Superintendent noted that PAB coding of purchase orders is not presently attempted at the school level and that book-keeping is still done on a manual basis at central office. He considered that there should be an increase in the extent to which accounts are coded but noted that this would require an educational program for the persons concerned.

The Superintendent, in commenting on his preferences for decentralized budgeting in five years' time, suggested: (1) increased authority and flexibility as outlined above, (2) more codification in the accounting system, and (3) improved financial reporting to schools.

Principals

Five of the six principals desired no change in the existing degree of decentralized school budgeting authority but four spoke strongly of the need to increase the amount of money available for capital expenditure. An increase in funding may have implications in respect to an expansion of the number of categories in the decentralized budget but this was not the subject of comment, except by one principal who would also prefer to see more authority at the school level in respect to the allocations for non-certificated staff.

Principals did not wish to see a change in operational flexibility procedures. Only one principal suggested a change for carrying a surplus or a deficit and this was in the direction of reducing the amount of carrying to no more than two per cent with the goal being a balanced budget.

Other changes suggested once in respect to budget preparation were: (1) more teacher input in budgeting, (2) more efficient use of principals' time, (3) an inflation factor for the mini-budget, (4) the reinstatement of text rentals in mini-budgets, and (5) more effective planning to identify areas of population growth. One change identified once in respect to the administration of budgets was the specification of a "cut-off" date for shipment of purchases from suppliers to reduce the cost inflation which results from delays.

The various changes suggested by principals generally described the future state preferred except that one principal, who desired no change at present, would like to see a total decentralization of budgeting in five years' time to include staffing. He appreciated that this would require much in-service training and a new role for principals.

GENERAL EVALUATION

The Superintendent was "moderately satisfied" with decentralized school budgeting in the system at the time of the study. Four principals indicated they were also "moderately satisfied" while two reported they were "highly satisfied." The responses suggest there were no important differences between the extent of satisfaction of the Superintendent and the principals.

FURTHER DISCUSSION

The information contained in this chapter is examined further in Chapter 13, where it is consolidated with that reported for other systems included in the second stage of the study. This comparative review, presented against the theoretical background of Chapter 2 and the review of literature in Chapter 3, is organized under the following headings:

Forces Influencing the Adoption of Decentralized School Budgeting.

Objectives of Decentralized School Budgeting.

Change Strategies.

Problems of Implementation.

Preparation and Administration of School Budgets.

Operational Problems.

Disagreements in Decentralized Budgeting.

Attainment of Objectives.

Preferences for Change.

Satisfaction with Decentralized School Budgeting.

Chapter 9

COUNTY OF STRATHCONA

The County of Strathcona is located to the east and south-east of Edmonton and includes the Town of Fort Saskatchewan for purposes of school administration. It was originally largely rural in nature but now has the characteristics of a predominantly urban area, with the Hamlet of Sherwood Park accounting for 26,500 of 41,500 persons in 1976. The rapid growth of the County school system is reflected in the student enrolment figures which increased 106.4 percent for 1965-74 compared to a provincial mean increase of 15.5 percent for the same period.

The September 30, 1976 student enrolment of 12,739 was the highest of any county and the fifth highest of any system in the province. The County operated twenty-seven schools in 1976-77, the furthest of which is twenty-four miles from the County Office in Sherwood Park.

Administration

Educational affairs for the County are the responsibility of a nine-member school committee, the composition of which is the same as the County Council with the addition of one representative from Fort Saskatchewan.

The Superintendent is assisted in the administration of the school system by a Deputy Superintendent and Assistant Superintendents of Curriculum and Instruction, Pupil Services, Personnel, and Business Administration. A total of twelve central office administrators are employed.

The organizational structure in central office changed markedly with the rapid growth of the system and with the appointment of a new superintendent in 1975. Ten years ago, the previous superintendent and an assistant superintendent were the senior officers. By 1972-73, two assistant superintendents were employed, one with responsibility for elementary schools, the other for secondary schools. A deputy superintendent was hired in the summer of 1973 with the expectation that he would assume the superintendency upon the retirement of the incumbent on April 1, 1975. The current organizational structure was developed in the year following the appointment of the new superintendent.

Responsibility for business administration has also changed in recent years. Financial affairs were handled separately until the early seventies with an Assistant Secretary-Treasurer for School Operations reporting to the Secretary-Treasurer of the County. An Assistant Secretary-Treasurer for Municipal Operations administered the municipal finances. The Assistant Secretary-Treasurer for School Operations prepared the school system budget with major input from the Superintendent. The Secretary-Treasurer, designated more recently as County Administrator, prepared the total budget for the County. A major change was made in 1975 with the appointment of a professional educator as Assistant Superintendent of Business Operations. The Assistant Secretary-Treasurer of School Operations is a member of his staff and is now more concerned with the revenue aspects of school system finances.

Collection of Data

Interviews were conducted with four central office administrators, six principals, and one assistant principal. Central office administrators interviewed were the Superintendent, in his capacity as Executive Officer of the School Committee and as a person influential in the decision to adopt decentralized school budgeting; the Assistant Superintendent of Business Administration, whose responsibilities include the preparation and administration of the school system budget; the Assistant Superintendent of Curriculum and Instruction, who is influential in the budgeting process; and the Deputy Superintendent who provided information on system organization prior to 1973 and the adoption and outcomes of decentralized school budgeting.

Decentralized school budgeting was implemented in 1974. The principals interviewed were selected from those serving in the principalship since 1972-73 in order that comparisons with the formerly more centralized practice could be made. The Assistant Superintendent of Personnel provided information which permitted the selection of a stratified random sample of six principals as indicated in Table 46. An assistant principal provided supplementary information at the request of the senior high principal.

Other information was obtained from the questionnaire completed by the Superintendent in the first stage of the study; budget manuals for 1975, 1976 and 1977; and statements of policy. Several school budgets, computerized reports, and related documents were examined.

Degree of Decentralized School Budgeting

The questionnaire completed by the Superintendent indicated a relatively high degree of decentralization on the School Budget Authority Scale, with school decisions made on allocations for thirteen of the

Table 46

Selection of County Principals for Interview

Level	Number of Schools	Principals Since 1972-73	Selected for Interview
Elementary	16	9	4
Elementary-Junior High	4	0	0
Junior High	4	1	1
Senior High	2	2	1
Junior-Senior High	1	0	0
Total	27	12	6

twenty-seven items in the scale. The administration of the decentralized budget was relatively controlled, with schools having a high degree of discretion to make budget transfers within the supplies and services purchased categories only. Unlike the majority of counties, no provision was made in system policy for schools to carry a surplus or a deficit. Exceptions were made, however, for small schools wishing to carry an amount for the purchase of a large item such as a piano.

Questionnaire responses were consistent with policy and procedure set out in the 1976 Manual for School Budgeting and Accounting provided by the Superintendent.

Decentralization Policy

The Superintendent indicated that the principal is generally considered to be the manager of his school and it is intended that he should have the authority to match this responsibility. The County is expanding its policy handbook to recognize this role. The current handbook contained no explicit statement of policy on decentralized school budgeting although it included School Committee Minutes which approved procedures for the preparation of school budgets in 1975. Decentralized school budgeting thus constitutes one aspect of a policy to systematically delegate authority for some matters pertaining to the operation of schools.

CHANGE PROCESS

Budget Practice Before Decentralization

Schools had minimal involvement in the budgeting process prior to 1974. Principals were advised of specific allocations on a pupil or classroom basis in particular categories of supplies and equipment and were requested to submit requisitions in the spring for the following school year. No reallocations were permitted so principals tended to requisition whether they needed an item or not. Requests for additional items could be made on a year-round basis with the Assistant Superintendents of Elementary and Secondary Education having the authority to approve. The school system budget was drawn up by the Assistant Secretary-Treasurer of School Operations with the major input coming from the Superintendent.

Recognition of a Need for Change

Four internal and five external factors were identified by respondents as contributing to or promoting decentralized school budgeting in the County.

Internal factors. Table 47 summarizes the classification of forces perceived as operating inside the school system. The appointment of a new superintendent was the most frequently identified factor. Eight of the ten respondents referred to the philosophy and management strategies of the Superintendent and his previous experience with decentralized school budgeting. The Superintendent indicated that, in respect to this experience, the greatest influence was his employment for eleven years in two departments of the federal government where each administrator was required to prepare and defend the budget for his section. He implemented a form of decentralized school budgeting in another school system after leaving the federal public service and immediately prior to his appointment as Superintendent of the County.

Table 47

Internal Factors Underlying Decentralized School Budgeting in the County

Individual or Group Articulating Interest	Description	Frequency	
		Central Office (N=4)	Principals (N=6)
Superintendent	Management strategies based on his philosophy and experience	3	5
School Committee, Central Office, and Principals	Funds were not allocated efficiently and equitably at the school level	3	3
Central Office	The volume of different requisitions arising from diversity within and between schools	1	0
Teachers	The desire to be more involved in decision-making	1	0

The second major internal factor was perceived to be a need articulated by the School Committee, central office administrators, and principals for a more efficient and equitable allocation of funds at the school level. Previous allocations did not correspond with local priorities and were perceived to be wasteful, while the assertion that "the squeaky wheel got the grease" was recounted by most respondents. Other factors operating inside the system were perceived to be an increasing "professionalism" on the part of teachers, who wanted to be more involved in decision-making, and the heavy burden of work required at central office to consider the diverse requisitions of schools. The latter was seen as a consequence of policy encouraging diversification between and within schools.

External factors. Table 48 summarizes the external factors. The major factor recalled by principals was the introduction of the Program Accounting and Budgeting System by the Department of Education. Perceptions varied with some seeing PAB facilitating a decentralized approach while others saw the two as virtually synonymous. The major external factor recalled by central office administrators was the rapid growth of the system. The growth of the County resulted in a large increase in the number of decisions made at central office. The introduction of the practice was also associated with the "accountability" movement, the economic policies of government resulting in the need to restrain expenditure, and awareness of practice in another system.

Decision. Several factors acting in combination appeared to contribute to a measure of dissatisfaction with previous budgeting

Table 48

External Factors Underlying Decentralized School Budgeting in the County

Factor	Description	Frequency	
		Central Office (N=4)	Principals (N=6)
Legal	The requirement of the Department of Education that school systems adopt PAB	2	4
Demographic	The rapid growth of population in the County resulting in more decisions on allocations and expenditure	3	1
Political	The "accountability" movement	2	0
Economic	The economic policies of the provincial government resulting in restraints on expenditure	1	0
Technological	Awareness of decentralized school budgeting practice in another system	0	1

procedures. The rapid growth of the County and the increasing diversity within and between schools meant an increased burden of work at central office. The political and economic factors raised the consciousness of the School Committee and central office administrators to the method of allocation which was perceived to be wasteful. Principals also became aware of differences in allocations between schools and expressed a desire for a more equitable system. These factors, together with the prevailing interest among some educators for greater involvement in decision-making, appear to have created a receptive atmosphere for the proposals of the new Superintendent who was generally perceived to be the critical force for change.

The association with the introduction of PAB would appear to lie in the fact that this method of reporting school system estimates and financial statements was required by the Department of Education for all systems in the same year (1974) that decentralized school budgeting was implemented in the County. This requirement did not extend to the preparation of estimates at the school level but the PAB format was initially adopted in the County as the most appropriate for this purpose.

The present Superintendent proposed decentralized school budgeting shortly after his appointment as Deputy Superintendent in the fall of 1973. He secured the support of the Superintendent and the School Committee with the latter approving a plan to involve principals and staff in the preparation of the 1974 budget. He discussed the strengths and weaknesses of the existing budget process with principals during visits to schools and perceived support for a change.

Planning the Change

The discussions conducted by the former Deputy Superintendent with central office administrators and principals and his preparation of a budget manual constituted the planning phase of the change process.

Implementing the Change

The 1974 budget. A series of meetings was conducted with principals in the fall of 1973 to explain the practice. These were the regular meetings of the various Principals' Associations with the Superintendent, Deputy Superintendent and Assistant Superintendent of Elementary Education in attendance.

The principals recalled that these meetings were largely to explain a practice which had already been approved. Two principals indicated that, despite dissatisfaction with existing practice, concerns were expressed, particularly in relation to the amount of extra work involved. Another recalled the Deputy Superintendent urging principals to try it for a year and then consider what amendments might be made.

Each school was asked to draw up its own estimates for fourteen components of the PAB system. These were defended by principals before the County Finance Committee in January 1974, and subsequently incorporated in the 1974 budget. Each school was asked to keep its own record of expenditure and to stay within its budget. Expenditure reports were not issued from central office until late 1974.

The Superintendent considered that the 1974 experience could be regarded as a pilot since procedures were not formalized until he wrote the first manual for school budgeting and accounting prior to the preparation of the 1975 budget.

Principals were asked to recall procedures used at the school when the practice was implemented. Recollections varied with some referring to the 1974 budget and others to 1975. None reported in-service activity beyond that provided by central office. Varying degrees of teacher involvement were indicated with two principals preparing the budget themselves while three asked each teacher on staff to provide estimates of needs. Responsibility for budget preparation was delegated to an assistant principal in the senior high school where subject coordinators provided estimates of needs. The first budget required six weeks to two months of preparation time in each school. Principals frequently consulted central office personnel for technical assistance during the first year. A school secretary was responsible for bookkeeping in each instance.

The 1975 budget. A major change for 1975 was that schools were required to use the Financial Information System (FIS) developed for counties, involving classifications and coding systems which were different to the PAB system used in 1974. An in-service activity was conducted in the fall of 1974 when central office personnel, principals, assistant principals, and school secretaries met for one day at a motor hotel to become familiar with the manual and the various budgeting, purchasing, and accounting procedures. The Deputy Superintendent, the newly-appointed Assistant Superintendent of Secondary Education, the Director of Personnel, and the Assistant Secretary-Treasurer provided assistance at this meeting.

Schools prepared estimates for 1975 on the basis of lump-sum allocations of $25.00 per elementary student, $27.50 per junior high student, and $28.25 per senior high student, with additional per student grants provided for Home Economics, Industrial Arts, and Band. The School Committee approved these allocations in December 1974.

Schools were informed of system-wide average allocations for 1974 to serve as guidelines for 1975 allocations. Assistance in developing priorities and estimates was provided by the Assistant Superintendents of Elementary and Secondary Education who also acted at the request of the Deputy Superintendent in drawing the attention of principals to allocations which contravened policy or procedure.

Budgets were defended by principals before the Finance Committee in January 1975. In addition to the basic school budget, principals also defended a list of capital items submitted as an extra request but to be included in the central office budget if approved. The School Committee approved the recommendations of the Finance Committee in January 1975. Schools were permitted to transfer funds between objects or functions providing approval was first obtained from central office.

Problems of Implementation

Principals and central office administrators were asked to identify problems encountered during 1974 and 1975.

Problems encountered at central office. Central office administrators perceived few problems at central office. The present Deputy Superintendent, formerly the Assistant Superintendent of Elementary Education, recalled a general concern at how far decentralization should go, what items should be decentralized, and whether principals would act responsibly. The present Superintendent recalled few problems from his point of view due to the favourable working relationship he enjoyed with his predecessor. He indicated that other central office personnel had to familiarize themselves with their new roles as resource people but he perceived no resistance to change. The Assistant Superintendent of Curriculum and Instruction, appointed Assistant Superintendent of Secondary Education in the fall of 1974, recalled his task of assisting principals develop estimates and priorities and acting at the request of the Deputy Superintendent in drawing attention of principals to errors in coding, incorrect transfers, and allocations which contravened established procedure.

Principals generally perceived the change to proceed smoothly as far as central office was concerned. One principal recalled difficulty the Deputy Superintendent experienced in encouraging principals to develop school budgets in 1974 while another perceived the Superintendent to be concerned at how far decentralization should go. Another recalled difficulties encountered by central office personnel in coordinating the change and making periodic adjustments in procedure as new problems arose at the school level.

Problems encountered in schools. The frequencies with which each type of problem experienced by principals, teachers, and secretaries was reported are summarized in Table 49.

One major problem reported by both groups was role conflict experienced by some principals who were concerned about the amount of time involved in preparing budgets and whether they had the necessary skills to perform the task. One central office administrator recalled that many of the older principals did not wish to become involved in the practice. The other major problem concerned incorrect procedures, with difficulties experienced in coding budget forms and requisitions. Two principals recalled the frustrations of accounting, especially those resulting from differences between estimated and actual costs. Inflation, freight charges, delays, and errors in billing were identified as causes. It was recognized as a learning period by several respondents although one central office administrator felt that more in-service activity may have alleviated the problems.

Table 49

Problems Encountered by School Personnel During Implementation in County

Persons Encountering	Stage in Budgeting	Reported by Principals (N=6)		Reported by Central Office Administrators (N=4)	
		Description of Problem	Frequency	Description of Problem	Frequency
Principals	Preparation	Role: amount of time, lack of skill and experience	4	Role: amount of time, some not wishing to participate	3
		Allocations: insufficient for small schools, excessive fees	2	Allocations: difficulty, violated guidelines	2
	Administration	Role: amount of time, lack of skill and experience	3		
		Transfers: delay	1	Transfers: violated guidelines	1
		Purchasing: delays, mix-ups, coding	2	Purchasing: errors in coding	2
		Accounting: difference between estimated and actual costs	2		
Teachers	Preparation	Role: amount of time	2	Role: not involved	1
	Administration	Purchasing: items purchased but not used	1		
Secretaries	Administration	Role: understanding procedures	2		
		Purchasing: delays, coding	3		
		Accounting: difference between estimated and actual costs	2		

Stabilizing the Change

The final phase of the change process was marked by the appointment of an Assistant Superintendent of Business Administration in August 1975. Until this time, the change had been coordinated by the former Deputy Superintendent who assumed the superintendency on April 1, 1975, following the retirement of his predecessor.

The Assistant Superintendent of Business Administration was principal of a junior high school in the system for six years prior to his appointment. He holds a Masters' degree in education and has completed courses relating to budgeting and finance.

Further refinements were made to the school budgeting handbook for 1976 and 1977. Information concerning current practice is set out in the next section of the chapter.

CURRENT BUDGET PRACTICE

Preparation of the Budget

The distribution of authority between central office and the school in the preparation of school budgets was described in general terms earlier in the chapter. This section provides details of the various procedures adopted at each level during the budgeting process. The focus is on the 1977 budget with brief comparisons being made to 1975 and 1976.

The funds allocated to schools for inclusion in their budgets were of two types: (1) a per pupil lump-sum amount which may be allocated at the discretion of the school in the various categories which have been decentralized; and (2) different per pupil amounts which must be allocated for specific purposes. For 1977, the former was $25 per pupil at each level, compared to $25, $27.50, and $28.25 in 1975 for elementary, junior high and senior high levels respectively. The specific grants were generally the same as those given in 1975 with a small increase in the Learning Resource fee charged to the student.

Principals submitted estimates for the decentralized budget in a set of standardized forms. A separate list of priorized "extra" capital items was also submitted in the same fashion as in 1975 and 1976.

The preparation process can be analyzed from the perspectives of time, task, and personnel involved at each of three levels; namely, School Committee, central office, and school. The analysis below is organized in this fashion.

School Committee. The School Committee established the amount of the grants described above in the fall of 1976 on the recommendation of the Superintendent. The Finance Committee of the School Committee met in January of 1977 to consider the budgets of the schools. Principals were required to defend their list of "extras" but had the option of defending their basic budget. Both parts of the budget were defended in previous years. The Finance Committee made recommendations to the School Committee on the "extra" requests which, along with the total of all basic school budgets, became part of the school system budget to be approved in March or April. The School Committee has never approved the basic decentralized budgets of individual schools.

Central office. The size of the various grants to be recommended to the School Committee was determined by the Superintendent in consultation with the Deputy Superintendent and the Assistant Superintendents. The Superintendent also attended budget defence meetings and considered serious problems associated with individual school budgets brought to his attention by the Assistant Superintendent of Business Administration.

The Assistant Superintendent of Business Administration prepared the manual for school budgeting and accounting for distribution in September 1976 and received budgets from schools in December. An assistant checked the accuracy of the allocations while the Assistant Superintendent examined their consistency with system policy and curriculum guidelines. Inappropriate allocations were referred to the Assistant Superintendent of Curriculum and Instruction or a member of his staff. The Superintendent was consulted in serious cases. The Assistant Superintendent of Business Administration chaired meetings of the Finance Committee in January and telephoned schools in February to confirm basic school budgets.

The Assistant Superintendent of Curriculum and Instruction is the third central office administrator with a major role in the preparation process. He provided information for principals on curriculum trends to assist in the development of priorities. He, or a member of his staff, met with principals when school allocations did not conform to curriculum guidelines. A consultant from his department visited every school to examine at first hand the nature of capital outlay items included in the list of "extra" budget requests.

Due to the extensive changes in personnel, structure, and role described earlier in this report, meaningful statements cannot be made on the perceived effect of decentralized school budgeting on the amount of time spent by central office administrators on the preparation of school and system budgets. The Superintendent suggested, however, that the amount of time spent at central office in preparing the 1977 school budgets would be much less than in the first year of decentralization since schools are now more familiar with the procedure.

School. The amount of time required to prepare school budgets in the fall of 1976 varied according to the method of preparation. The longest period was ten weeks in the senior high and the shortest was one week in a large elementary school.

The procedure for preparing budgets was generally the same as that described for the first year of implementation. Three basic procedures were identified which varied according to the extent of teacher involvement. System policy does not require teacher involvement but the participation of the total staff has been recommended by the Superintendent in the 1976 and 1977 manuals.

The principal who completed his budget in one week developed the document by himself and distributed it to teachers at a staff meeting. Changes were made if a need was established and a reduction could be effected elsewhere. The second method, employed at the senior high, reflected the departmentalized nature of the school. Budget preparation was coordinated by the First Assistant Principal who invited subject coordinators to submit a statement of needs for 1977. Subject coordinators, in turn, asked teachers to provide information. The requests were consolidated and reductions made, whenever necessary, by consultation on an individual basis between the Assistant Principal and the coordinator.

The Faculty Council of administrators and coordinators resolved the issue when reductions could not be made in this fashion. The budget was not presented to teachers. The third type, employed in another large elementary school, began with an inventory of equipment and supplies by a teacher aide. Each teacher was invited to submit a statement of needs on a specially developed school form. These were consolidated by the principal and referred back to a staff meeting when reductions were required. The process was completed by a formal staff vote adopting the budget. A variation of this procedure used in another school called for teachers to priorize their needs, thus permitting the principal to make reductions without calling a meeting of staff.

Each principal reported much less involvement of central office than in the first year of implementation. This reflected greater familiarity with procedures at the school level. Communications from central office to the school were usually after budgets were submitted and generally sought clarification or advised errors in calculation or procedure. Four principals commented on the smooth operation of the practice and praised the contributions of central office personnel, especially the Assistant Superintendent of Business Administration. One respondent observed that this Assistant Superintendent took one year to become familiar with patterns of school organization which differed from that to which he was accustomed.

Principals were asked to indicate their perceptions of the effect of decentralized school budgeting on the amount of time spent by school personnel on the preparation of budgets. Most reported that principals, teachers, and secretaries had all devoted more time. None perceived that any school personnel now devoted less time. The responses are summarized in Table 50.

Table 50

Principals' Perceptions of Effect of Decentralization
on Time Spent by School Personnel on
Preparation of Budget in County

Persons Involved in Preparation	Perceived Effect of Decentralization			
	More Time	Same Time	Less Time	Not Applicable
Principal				
By self	5	1	0	0
With school personnel	4	2	0	0
With central office personnel	4	2	0	0
Other school personnel				
Assistant principal	3	1	0	0
Department heads	2	0	0	4
Teachers	5	1	0	0
Secretary	6	0	0	0

Administration of the Budget

The distribution of authority between central office and the school in the administration of school budgets was described in general terms earlier in this report. This section provides information on the procedures employed in the administration of the 1976 and 1977 budgets in respect to transfer, carrying forward, purchasing, control, and reporting.

Transfers. The budget manual indicated that schools may transfer funds within and between budget categories providing the original constraints on budget allocations were observed and central office approval first obtained. This tended to be a routine process of information providing the constraints were respected.

The Assistant Superintendent of Business Administration personally signed all requests for transfer prior to the proposed school expenditure until 1976, when the process became "too laborious." For 1977, schools were permitted to make any legitimate transfers within the limits of their budgets without first securing the approval of central office. The perceptions of principals on the transfer procedures coincided with that of central office personnel.

Carrying a surplus or deficit. The Assistant Superintendent of Business Administration advised that constraints in the county system did not permit schools to carry forward a surplus or a deficit although procedures existed to facilitate the handling of orders which have not been filled at the end of the year.

A form of carry-over may be permitted in exceptional cases. One principal in a small school reported that a piano had been purchased in this way. Schools are advised that the amount of any over-expenditure will be deducted from the budget for the following year.

Purchasing. Purchasing procedures have generally remained centralized with the principal submitting a requisition to central office where purchase orders are prepared. All purchase orders are seen by the Assistant Superintendent of Business Administration after his assistant checks the coding. The Assistant Superintendent of Curriculum and Instruction monitors purchases where schools wish to acquire equipment other than that usually purchased by the system. He reported a much reduced role compared to the first year due largely to the appointment of the Assistant Superintendent of Business Administration. Schools may purchase from petty cash or by using school-generated funds with subsequent reimbursement from central office and debiting to the school's decentralized account. The frequent use of school-generated funds is the main change in purchasing procedures in recent years.

Principals were asked to indicate their perceptions of the effect decentralized school budgeting had on the amount of time spent by school personnel on purchasing. The responses summarized in Table 51 indicate that more time was generally devoted to this task. No meaningful comparisons could be made for central office personnel.

Table 51

Principals' Perceptions of Effect of Decentralization on Time Spent by School Personnel on Purchasing in County

Persons Involved in Purchasing	Perceived Effect of Decentralization			
	More Time	Same Time	Less Time	Not Applicable
Principal	4	1	1	0
Assistant Principal	3	1	0	2
Department Heads	2	0	0	4
Teachers	5	1	0	0
Secretary	5	1	0	0

Control. The procedures for transfer and purchase set out above define the method of control of expenditure. The Superintendent is involved only when schools approach an over-spending situation or when questions are raised at a lower level on procedural matters. He monitors financial reports to identify schools experiencing difficulty with budgeting.

The control process is facilitated at the local level where schools maintain their own books. Each of the six principals reported that these were kept by a secretary who, in each instance, spent more time on record-keeping as a result of decentralized school budgeting. Three of the principals indicated that they personally spent more time on record-keeping but all reported that teachers were not involved in this task.

Financial reports. A system of computer reports to schools was instituted in August 1976. The first report for 1977 was issued in April. Principals reported that these had minimal value because of the time delay in reporting expenditure and the consequent difficulty in reconciling them with school records. The Assistant Superintendent of Business Administration indicated that he was aware of these shortcomings and hoped that a revised form, to appear in mid-1977, may result in schools no longer needing to keep their own records.

Current Problems in Budgeting

Problems encountered by central office administrators and principals during the implementation phase were discussed earlier in this report. Respondents were also asked to recall problems encountered in 1976 and 1977 during what might be termed the "stabilization" phase.

Problems encountered at central office. The Superintendent indicated few problems from a personal standpoint, largely because these were solved before they reached his desk. Other central office administrators did not perceive the Superintendent to encounter problems with the practice.

The Assistant Superintendent of Business Administration reported that, in addition to the problem of computerized financial reports, he was concerned by: (1) requests for transfer which violated constraints, and (2) complaints by principals who felt that they were not receiving enough money.

The central problem for the Assistant Superintendent of Curriculum and Instruction was associated with schools wishing to purchase equipment which was not approved for standard use in the system.

Four of the six principals perceived no problems at central office. One recognized the problems experienced by the Assistant Superintendent of Business Administration with coding errors made at the school level and with the computerized reports. Another felt that the Assistant Superintendent of Business Administration was also burdened by schools making requests at inopportune times and that the Assistant Superintendent of Curriculum and Instruction lacked the funds needed to meet unexpected requests.

Problems encountered in schools. The major problem reported by principals in the implementation phase concerned demands on time, and lack of skill and experience. Only one principal expressed such a concern for 1976 and 1977 although two of the three central office administrators responding to this question felt that this was still a problem for principals.

The responses of principals are summarized in Table 52. Most problems are perceived to lie in the administration phase of the process with three principals reporting difficulties with purchasing, accounting, and with the computerized reporting. Those relating to purchasing and accounting were the same as those reported when the practice was implemented in 1974. The computerized reports have failed to alleviate the concern over the delay between the incurring of an expense and the report to the school.

Only one principal identified a concern of teachers; namely, a frustration experienced when requests for unbudgeted items were turned down in the school where the budgeting was done largely by the principal. Two of the three central office administrators perceived the problem encountered by teachers was lack of involvement in the budgeting process in some schools.

Disagreements

Respondents were asked to compare the frequency of their disagreements with persons at different levels of the system on matters related to school budgeting, and to give their perceptions of the effect decentralized school budgeting had on the frequency and severity of such disagreements.

Central office administrators. The three central office administrators currently influential in decentralized school budgeting

Table 52

Principals' Perceptions of Current Problems Encountered by School Personnel in County

Persons Encountering Problem	Stage in Budgeting Process	Description of Problem	Frequency (N=6)
Principals	Preparation	Role: Amount of time required	1
		Allocations: should be based on need	2
	Administration	Transfers: rejection by central office	1
		Purchasing: delays, mix-ups, requests for unbudgeted items	3
		Accounting: difference between estimated and actual costs	3
		Reporting: computerized reports slow, inadequate breakdown	3
Teachers	Administration	Frustration when requests for unbudgeted items are rejected	1
Secretaries	Administration	Same problems of purchasing, accounting, and reporting indicated for principals	

compared the frequency of their disagreements with each other and with principals.

Disagreements with the School Committee were described as "seldom" and typically occurred early in the financial year when the demands of the system were at variance with the desire of the Committee to limit tax increases.

Disagreements among central office administrators were described as "seldom" or "never." Differences in opinion occurred in respect to: (1) funding for programs such as Early Childhood Services and the Learning Resource Centre, and (2) the educational value of some budget requests made by schools.

Disagreements with principals were described as "seldom" or "occasional" and typically concerned the availability of funds and requests by principals to transfer funds from instructional materials to capital equipment when curriculum guidelines suggested an emphasis was required in the former.

Central office administrators were not asked for their perception of the effect of decentralized budgeting on the frequency and severity of disputes because none had worked at central office prior to decentralization. Two administrators suggested, however, that both the frequency and severity of disagreements between central office and the school would likely be less.

Principals. Principals were asked to give perceptions of their disagreements with central office personnel, teachers, secretaries, and with assistant principals and department heads where special roles in budgeting were involved. The responses summarized in Table 53 indicate

Table 53

Principals' Perceptions of Frequency and Severity of Disagreements in the County

Persons in Disagreement	Frequency of Disagreements				Perceived Effect of Decentralization					
					Frequency			Severity		
	Often	Occasionally	Seldom	Never	Less	More	Same	Less	More	Same
Principal and central office	0	2	3	1	1	1	4	2	0	4
Principal and teachers	0	2	4	0	3	0	3	3	0	3
Principal and assistant principals	0	0	0	3	1	0	1[a]	1	0	1[a]
Principal and department heads	0	1	0	0	1	0	0	1	0	0
Principal and secretary	0	0	2	4	1	0	4[b]	1	0	4[b]

[a] One school had no assistant principal before decentralization.

[b] One school had no secretary before decentralization.

the frequency was generally described as "seldom" or "never" with decentralized school budgeting perceived to have resulted in less frequent and less severe disagreements or not to have had an effect at all. One principal, in explaining these effects, observed that the allocation of resources is now "out in the open." Another observed that teachers now understand that if an item is not budgeted then it frequently cannot be acquired.

All five principals identifying disagreements referred to the administration of the budget. Three chose an example related to transfer of funds while two described disagreements relating to expenditures from budgets; namely, the billing of freight charges to the school and orders which are not filled. Only one principal referred to disagreements during the preparation of budgets and these concerned the technical details of budget preparation and the fact that his school was required to budget for textbooks in the "extras" submission due to lack of funds in the decentralized budget.

Disagreements with teachers were illustrated with a wide variety of issues. Two principals referred to disputes during the preparation of the budget which concerned the nature of instructional materials to be included. The other four principals described disagreements during the administration of budgets related to requests for items not budgeted, the quantity and cost of items purchased, the incurring of unnecessary delivery costs, and the acquisition of items which were used infrequently. The two principals reporting disagreements with secretaries described the method of classifying expenditures and the manner in which forms should be set out.

OBJECTIVES AND OUTCOMES

Objectives

Formal objectives. The policy handbook of the school system and the various manuals for school budgeting and accounting contained no formal statements of the objectives of decentralized school budgeting. The policy handbook contained four references to school budgeting and only one, an excerpt from the 1975 Manual for School Budgeting and Accounting, implied an objective:

> Throughout the document there is an attempt to give total dollar amounts in such a way that there is freedom for principals and staff to draw up their estimates according to the types of program they want to run. There is always the need to maintain a sort of dynamic balance between control based on revenue available, and freedom for purchasing based on priorities and needs that have the greatest ultimate value to the student.

This statement, signed by the former Superintendent, suggested an objective of resource allocation to meet the requirements of programs developed at the school level to the ultimate benefit of the student.

Perceptions of respondents. Central office administrators and principals were asked to give their perceptions by indicating the value placed on each of eight objectives included in the schedule. Table 54 contains a summary of responses together with perceptions of the progress which had been made toward the attainment of objectives.

Objectives generally valued highly by central office administrators (considered as having "much" or "great" value by at least three of the four interviewed) were those related to principal and teacher involvement, equity among schools, efficient use of funds, flexibility in program

Table 54

Objectives of Decentralized School Budgeting in the County: Perceived Value and Progress

Objective	Criterion	Central Office Evaluation (N=4)					Principals' Evaluation (N=6)				
		None	Little	Some	Much	Great	None	Little	Some	Much	Great
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	0	0	4	1	0	0	4	1
	Progress	0	0	0	3	1	1	0	1	1	3
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	1	2	1	1	0	2	1	2
	Progress	0	0	4	0	0	1	0	2	2	1
3. To provide a more equitable allocation of funds among schools	Value	0	0	0	0	4	0	0	1	2	3
	Progress	0	0	0	2	2	0	0	1	3	2
4. To obtain more efficient use of funds allocated to each school	Value	0	0	0	0	4	0	1	0	1	4
	Progress	0	0	2	2	0	0	1	1	1	3
5. To provide schools with greater flexibility in the development of the instructional program	Value	0	0	1	1	2	0	2	1	1	2
	Progress	0	0	3	1	0	0	2	1	2	1
6. To encourage school and teacher innovativeness	Value	0	0	1	1	1[a]	0	1	2	1	1[b]
	Progress	0	0	2	1	0[a]	0	1	2	2	0[b]
7. To reduce the time required to meet changing school needs	Value	0	1	1	0	2	2	1	0	3	0
	Progress	1	0	1	1	1	2	1	1	2	0
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Value	0	0	0	1	3	0	0	2	1	3
	Progress	0	1	0	2	0[a]	0	0	3	2	1
Other											
To facilitate long-range planning	Value	0	0	0	0	1					
	Progress	0	0	0	1	0					

[a] One central office administrator declined to respond to these items.

[b] One principal declined to respond to this item.

development, innovativeness, and awareness of the relationship between objectives, outcomes, and costs.

Objectives generally valued highly by principals (considered as having "much" or "great" value by at least four of the six interviewed) were those related to principal involvement, equity, efficiency, and cost awareness.

The differences between the two groups lay in the larger proportion of central office administrators valuing teacher involvement, innovativeness, and program flexibility. Of special interest was the fact that teacher involvement was valued as "much" or "great" by fewer respondents in both groups than was principal involvement. Furthermore, relatively low value was placed by both groups on the objective of reducing the time required to meet changing school needs.

Implicit in the objective of the involvement of school personnel was the expectation that the decisions would better reflect the priorities of the school. One central office administrator placed this objective in the context of the "tight" money situation facing the County at the time of implementation. He felt that principals were better suited than central office personnel to determine school priorities in such a situation. Another central office administrator and one principal set this objective in the broad context of accountability.

Principals suggested, in commenting on the objective related to cost awareness, that funds would be allocated more efficiently. One principal explained that "you give a lot more thought to it when you do your own budgeting," while another remarked that it was "almost like a personal budget."

Outcomes

Table 54 included a summary of the perceptions of respondents of progress made toward attaining the objectives of decentralized school budgeting.

Objectives generally valued highly by central office administrators (considered as having "much" or "great" value by at least three of the four administrators) were those related to principal and teacher involvement, equity among schools, efficient use of funds, flexibility in program development, innovativeness, and cost awareness. Using the same criterion, a high degree of progress was generally seen for only three of these--principal involvement, equity, and cost awareness. The responses suggest that at least half saw a need for more efficient use of funds, greater flexibility and innovativeness, and especially, greater teacher involvement in the allocation of funds.

Objectives generally valued highly by the principals (considered to have "much" or "great" value by at least four of the six principals) were those related to involvement of principals, equity, efficiency, and cost awareness. Using the same criterion, a high degree of progress was generally seen for all except cost awareness. The responses suggest that at least half saw a need for greater awareness at the school level of the relationship between objectives, outcomes, and costs. The differences between the two groups are summarized in Table 55.

Several principals elaborated on their responses. One challenged the notion that equitability could be accomplished through standardized allocations, arguing that grants based on "need" were more appropriate. Other principals saw the standardized allocation as overcoming the problem

Table 55

Outcomes for Highly Valued Objectives in County

Objective	Central Office Evaluation High Value	Central Office Evaluation High Progress	Principals' Evaluation High Value	Principals' Evaluation High Progress
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Yes	Yes	Yes	Yes
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Yes	No	No	No
3. To provide a more equitable allocation of funds among schools	Yes	Yes	Yes	Yes
4. To obtain more efficient use of funds allocated to each school	Yes	No	Yes	Yes
5. To provide schools with greater flexibility in the development of the instructional program	Yes	No	No	No
6. To encourage school and teacher innovativeness	Yes	No	No	No
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Yes	Yes	Yes	No

felt previously in the County when it was "the squeaky wheel which got the grease." Two principals indicated that it took longer to meet school needs because of centralized purchasing procedures. Another principal, however, felt that needs were met faster because of the increased equity in allocations. One principal felt that attainment of the objective related to the development of flexibility in instructional programs was impaired because central office was not including enough money in the decentralized budgets.

SUGGESTIONS FOR CHANGE

Central office administrators and principals were asked to indicate changes they would like to see in school budgeting practice. The responses are summarized in Table 56.

Table 56

Preferences for Changes in Decentralized School Budgeting Practice in the County

Area of Authority	Group	Desired Degree of Decentralization			
		More	Same	Less	Undecided
School Budget Authority	Central Office	2	1	0	1
	Principals	2	4	0	0
Operational Flexibility	Central Office	0	4	0	0
	Principals	2	4	0	0
Carry Surplus or Deficit	Central Office	0	4	0	0
	Principals	4	2	0	0

Central Office Administrators

Differences occurred among central office administrators in respect to school budget authority. One did not wish to include staffing in the decentralized budget. Another felt that principals should be more involved in staffing but was not sure this should extend to budgeting. A third indicated that there was not much more which could be decentralized unless the concept of differentiated staffing was embraced. He recognized this as a "hot potato" as far as the ATA was concerned but felt that the County should consider such a change when central office had adjusted to present practice. He suggested that additional central office staff may be needed to monitor a greater degree of decentralization. The fourth also supported an expansion to include staffing, starting with paraprofessionals, but only when principals have become accustomed to existing practice.

No changes were suggested in respect to operational flexibility or carrying forward a surplus or a deficit. For the latter, two administrators felt it was desirable to permit the practice but believed that County financial practice constrained this possibility. One indicated that computer technology may facilitate a change in this area.

Other changes suggested by individual administrators were: (1) more long-range planning in school budgeting, and (2) computer programs for improved reporting to schools in respect to amounts encumbered, percentage of funds expended by subject area, and year-to-year comparisons to facilitate planning.

Principals

Four principals preferred to maintain the status quo in respect to the degree of school budget authority and operational flexibility. One desiring more authority felt that the practice should be expanded to include staffing provided much in-service and leadership from central office was provided, while the other, a principal of a small school, spoke in terms of the need for the authority to make more decisions which might affect the instructional program. The latter believed that it was the intent of central office to make schools more "self-sufficient" in the future. Both principals preferring more operational flexibility desired total discretion to transfer funds within the limit of the decentralized budget.

Four principals preferred that schools be permitted to carry forward a surplus or a deficit. Two described the present system where some schools tend to spend simply to "use up" their budget near the end of the year.

Two principals identified areas for change in accounting procedures. One principal was especially critical about the time spent on bookkeeping and the delays associated with purchasing, and recommended that, unless the amount of money in the decentralized budget could be expended from a school bank account with appropriate year-end accountability, the accounting function would be better recentralized. The other pointed to the need for accurate monthly computer reports.

The future state of decentralization described by respondents incorporated the changes described above. The most important observation suggested by the responses is that no evidence was provided that school system personnel preferred less decentralization in budgeting practice. A cautious and qualified preference for more school authority was sounded by several respondents in both groups.

GENERAL EVALUATION

The general evaluation of decentralized budgeting in the County reflected the responses in the previous section. All respondents indicated varying degrees of satisfaction with current practice. The responses are summarized in Table 57.

Table 57

Satisfaction with Current Budget Practice in the County

Degree of Satisfaction	Central Office	Principals
Highly satisfied	1	1
Moderately satisfied	2	4
Slightly satisfied	1	1

The responses suggest that no important differences exist between the two groups in respect to the extent of satisfaction with current budget practice.

FURTHER DISCUSSION

The information contained in this chapter is examined further in Chapter 13, where it is consolidated with that reported for other systems included in the second stage of the study. This comparative review, presented against the theoretical background of Chapter and the review of literature in Chapter 3, is organized under the following headings:

Forces Influencing the Adoption of Decentralized School Budgeting.

Objectives of Decentralized School Budgeting.

Change Strategies.

Problems of Implementation.

Preparation and Administration of School Budgets.

Operational Problems.

Disagreements in Decentralized Budgeting.

Attainment of Objectives.

Preferences for Change.

Satisfaction with Decentralized School Budgeting.

Chapter 10

CALGARY SEPARATE SCHOOL DISTRICT

The Calgary Roman Catholic Separate School District operated fifty-seven schools in 1976-77 and had a September 30, 1976, student enrolment of 22,309. It has the fourth highest enrolment in the province. The rapid growth of the system is reflected in a 1965-74 increase of 44.1 per cent compared to a provincial mean increase of 15.5 per cent for the same period.

Administration

The Superintendent is assisted in the administration of the system by a Director of Business Affairs, who is legally the Secretary-Treasurer, and a Director of Education, with Coordinators of Elementary Education, Secondary Education, Pupil Personnel Services and Special Services reporting to the latter. The Superintendent, Secretary-Treasurer, and Director of Education, form an Executive Council.

The composition of the senior central office administrative staff has remained relatively stable during the period of rapid growth. The Superintendent, Director of Education, and the Coordinators of Elementary Education, Secondary Education, and Pupil Personnel Services have all occupied their present positions for eleven years or more. The Secretary-Treasurer was appointed in 1974.

Collection of Data

Interviews were conducted with four central office administrators, the Secretary-Treasurer, and six principals. Central office administrators interviewed were the Superintendent and Director of Education, both influential in the decision to decentralize school budgeting and in current budget practice, and the Coordinators of Elementary and Secondary Education, both of whom were influential in the decision and have major roles in the preparation and administration of school budgets. The Secretary-Treasurer was influential in a recent major change in decentralized school budgeting practice, and has an important role in the preparation and administration of school budgets.

The six principals interviewed were selected from among the officers of the three Principals' Councils in recent years. The presidents of the Senior High and Junior High Councils for each of 1975-76 and 1976-77 were selected along with the presidents of the Elementary Council for 1974-75 and 1976-77. The different Councils are officially recognized and are consulted by central office administrators in the preparation of the System budget. Table 58 summarizes the number of schools at each level of the system which are represented on the Councils.

Other information was obtained from the questionnaire completed by the Superintendent in the first stage of the study, statements of policy, computerized financial reports, and the collective agreement with teachers in the system.

Table 58

Schools in Calgary Separate School District

Level	Number of Schools	Principals Interviewed
Elementary	32	2
Elementary-Junior High	17	1
Junior High	4	1
Elementary-Junior-Senior High	1	1
Senior High	3	1
Total	57	6

Degree of Decentralized School Budgeting

The questionnaire completed by the Superintendent indicated a relatively high degree of centralization on the School Budget Authority Scale, with school decisions made on allocations for only three of the twenty-seven items in the scale. Indeed, a central office decision with no school participation is made for twenty-one items. In general terms, these responses indicate a relatively low degree of school involvement in the budgeting process prior to the adoption of the system budget by the Board.

A relatively high degree of decentralization exists in respect to school involvement in the budgeting process following the adoption of the system budget. Questionnaire responses on the Operational Flexibility Scale indicated that schools had high discretion to make transfers within and between the services purchased, supplies, and capital outlay categories of school budgets. The system ranked in the top twenty-five per cent on this scale.

Schools are permitted to carry forward a limited amount of a surplus for all items in their budgets. In 1976, funds were carried forward from 1975 only when items in excess of $200 were ordered in 1975 but were not received until 1976. Only in the event that a school had drastically exceeded its budget did system policy in 1976 provide for a deficit to be carried forward.

Questionnaire responses were consistent with policy and procedure observed in the system.

Decentralization Policy

Decentralized school budgeting was introduced as part of a general trend in the system to decentralize as much authority as possible to the principal. All central office administrators interviewed described the interests articulated by principals, senior central office administrators and the Board in the late sixties and early seventies which culminated in a Board decision to decentralize much of the decision-making. These interests and other factors are analyzed in the next section of this chapter.

The present pattern of decentralized school budgeting is supported by an explicit statement of policy on the subject of "Budget Control and Transfer of Budget Allotments." Policy Number 2.007 of the District provides that school budgets shall consist of two categories--controllable expense and non-controllable expense:

> Controllable expense shall be comprised of all non-staff related budget expenditures allocated to the schools. The school principal is responsible for the allocation of the expenditure requirements subject to the continuing overview of the coordinator for appropriateness of expenditure pattern. Under no circumstances will a school be allowed to over-spend its controllable budget.
>
> Non-controllable expense shall be comprised of all staff related budget expenditures. The allocation of staff, as approved by the Board of Trustees, shall be controlled by the responsible coordinator; all requests for transfer or alteration of allotment must be made by the Executive Council. In accordance with the existing collective agreement, an adjustment of professional staff in a school which would decrease the school allocation requires the approval of the principal and a majority of his staff.

The high degree of operational flexibility in the services purchased, supplies, and capital outlay categories of budgets is thus expressed in terms of "controllable expense" in the policy statement.

The policy in respect to "non-controllable expense" contains a provision which permits alternative staffing patterns of the kind described in the recent study (Ratsoy et al., 1976) of staffing in Alberta school systems. Each school is allocated a specific number of professional staff units using a formula applied system-wide. Professional staff units may be exchanged for paraprofessional staff units on the basis of average salaries for these positions if the provisions of the policy for "non-controllable expense" are observed. The collective agreement between the Board and teachers provides that "staff development within a school shall be the responsibility of the principal and that staff." The Director of Education indicated that this policy is effected in respect to staff flexibility by the requirement that the principal, in making his request for a change, must provide the supporting motion which was adopted at a staff meeting and the signatures of members of staff.

CHANGE PROCESS

The high degree of operational flexibility for controllable expense described in Policy 2.007 was implemented in 1975. This practice evolved over a period of years from 1967 rather than from a relatively high degree of centralization in 1974.

Budget Practice Before Decentralization

Prior to 1967, schools were allocated instructional supplies according to a scale of issue and had no authority to reallocate or expend funds. Schools were allocated funds for instructional supplies on a per pupil basis by subject commencing in 1967. In 1968, senior high schools were permitted to reallocate these amounts within the supplies category subject to the approval of the Director of Education. This was extended to other schools in the system in 1969. In 1971, the system adopted a form of program budgeting which facilitated the procedures for the various classifications of both supplies and equipment. The flexibility in staffing provided in Policy 2.007 was introduced in 1972 while the high discretion to make transfers for controllable expense without the approval of the Director and the provision for a limited carrying of a surplus were implemented in 1975.

Recognition of a Need for Change

The Superintendent indicated that the Board of Trustees, the former Secretary-Treasurer, the Director of Education, the Coordinators, as well as himself, were influential in the decision to decentralize school budgeting. The Superintendent, who also reported on the role of the Board, the Director and the two Coordinators were interviewed in respect to the factors underlying the practice, together with five of the six principals who were principals at the time of the change. The former Secretary-Treasurer had left the city and was not interviewed.

Internal factors. Table 59 summarizes the classification of forces perceived as operating inside the school system. A general interest in decentralization among senior central office administrators and principals were the two factors mentioned most frequently. No individual at central office was generally perceived as being more

Table 59

Internal Factors Underlying Decentralized School Budgeting in Calgary Separate

Individual or Group Articulating Interest	Description	Frequency	
		Central Office (N = 4)	Principals (N = 6)
Board	School is focus of system, reaction to pressures from schools	2	0
Central office administrators	Principal is an educational leader, increasing volume of work in preparing scale of issue, support for innovative projects, reaction to pressures from schools, more efficient use of funds, ideas gained on trips	3	2
Principals (Principals' Councils)	Higher level of education, desire for more involvement in budgeting, supplies not meeting schools needs	3	5
Teachers (ATA Local)	Schools should be more involved in decision-making, interest in reducing size of central office staff	1	0

influential than others.

Central office administrators referred to the increasing burden of work faced by themselves and the former Secretary-Treasurer in determining the scale of issue of instructional supplies each year. This became a problem with the rapid growth of the system. The former Secretary-Treasurer considered that accounting requirements could be met by recording allocations for individual accounts but permitting schools to reallocate as the need arose with administrators perceiving that educational requirements could be met by the same change. Three central office administrators referred to the change in the characteristics of principals. The rapid growth of the system demanded the recruitment of young principals whose university training and interests reflected a desire for more involvement in decision-making. Two administrators recalled pressure for change applied informally as well as through the newly-created Principals' Councils while one felt that principals gave support to a proposal for change initiated at central office. The former two perceived central office and the Board reacting to pressures from principals with one recalling that the ATA desired more school involvement in decision-making and a reduction in the size of central office staff. All principals interviewed identified pressure from principals as a factor underlying the adoption of the practice.

Two central office administrators and one principal explained the tradition of decision-making at the school level for senior high schools where principals in the early sixties were members of religious orders. These schools operated with a relatively high degree of autonomy.

External factors. Table 60 summarizes the external factors, the most frequently mentioned of which was the developing movement toward accountability. This source of external pressure is classified as a political factor. Associated with this was the growing interest in a form of program budgeting at the provincial level. Several respondents recalled that the interest of the Department of Education in the budget practice of this system resulted in the inclusion of the District in a pilot project in PPBS. The second major external factor was the rapid growth of the school system which created pressures for change in central office in the manner described above.

Decision. The change from a relatively centralized budgeting practice to the current, relatively decentralized pattern occurred in a series of stages rather than a single instance of planned change. The change analyzed further below is that which involved the initial decision by the Board permitting principals to reallocate within the instructional supplies portion of the budget. This occurred in 1968 for senior high, 1969 for junior high and elementary, with a degree of stabilization reached in 1971 with the introduction of program budgeting.

Planning the Change

No distinct planning phase was identified. The determination of the per pupil allocations by subject was an annual practice prior to the change and no immediate amendment to procedure was required.

Table 60

External Factors Underlying Decentralized School Budgeting in Calgary Separate

Factor	Description	Frequency	
		Central Office (N = 4)	Principals (N = 6)
Political	The "accountability" movement and the developing interest in program budgeting	3	3
Demographic	The rapid growth of population served by system resulting in more decisions on allocations and expenditures	2	0
Legal	Regulations of the Department of Education which permitted curriculum decisions at the local level	0	1
Cultural	View of authority emerging in the sixties especially for Catholics as a result of the Vatican Council and the influence of Pope John	0	1

Implementing the Change

No formal in-service activities were conducted other than briefings at regular meetings of the Principals' Councils where accounting procedures were explained. The former Secretary-Treasurer, the Director of Education, and the two Coordinators provided assistance on these occasions. Further meetings were held when program budgeting was introduced.

No changes in personnel or in organizational structure accompanied the change at either central office or in schools. The Superintendent used the term "osmosis" to describe the manner in which the change was accomplished. The Director of Education indicated that the practice could not have been implemented without the technological changes resulting in improved data-processing capability which occurred at the time. The later introduction of program budgeting and the computer required the hiring of persons from other school systems.

The important changes in role at central office were the movement of authority to initiate expenditure from the Coordinators and subject supervisors to the school level and the task of the Director of Education in approving transfers. The Superintendent considered that decentralized school budgeting had no effect on the amount of time he spent on the preparation and administration of school budgets but the other three central office administrators interviewed reported that less time was spent by them and other administrators on their staffs for both preparation and administration of school budgets.

The five principals reporting on the period of implementation were asked to indicate their perception of changes in role and procedure which occurred generally in schools at their respective levels. Principals indicated in each instance that certain teachers on staff were asked to determine expenditure using central office allocations by subject as a general guide. At the elementary level, the respondent indicated that a fairly informal procedure was adopted where selected teachers would be asked to requisition items. In September the balance of funds would be reallocated according to need. The two junior high principals indicated that they initially had the major role in determining allocations but this later became the responsibility of the assistant principals. Department heads were requested to determine how the various subject allocations would be spent. They perceived this to be the general pattern in schools at their level at the time. Both senior high principals reported the involvement of department heads in determining expenditures. In general terms, it is apparent that schools followed the guidelines established by central office and that a formal budget document showing detailed and planned reallocations was not prepared. Reallocations by transfer occurred near the end of the year after major expenditures within these guidelines had been effected.

Respondents were asked to indicate their perception of the effect of decentralization on the time spent by school personnel on budgeting. All school personnel were seen to spend the same or more time on budget preparation, purchasing, and record-keeping. Of special interest was the fact that one respondent from each level perceived teachers to spend the same amount of time on the preparation of the budget following decentralization suggesting that involvement of teachers in this phase may have been limited at the time under consideration. All but one respondent considered that teachers spent more time on purchasing as a result of the change.

Stabilizing the Change

The change entered a stabilization phase with the adoption of program budgeting in the early seventies. Apart from a highly controlled flexibility of staffing introduced in 1972, no major change occurred until 1975 when the Director was no longer required to authorize transfers.

Problems of Implementation

Problems encountered at central office.

The Superintendent indicated that he personally encountered no problems with the implementation of the practice but recalled that others at central office were concerned at the problem of overexpenditure by some principals. The major problem described by two central office administrators was the change in role. Business administration personnel and subject supervisors used to many years of centralized control had to become accustomed to decisions being made at the school level. One administrator indicated some initial concern among business administration personnel at the lack of book-keeping skills at the school level.

Three principals perceived that central office personnel were initially concerned at the lack of experience and skill of some principals while another recalled a lack of understanding of procedures at the central office level. The latter also considered that some central office personnel faced an increased burden of work with the many questions posed by principals concerning prices.

Problems encountered in schools. Two central office administrators recalled role conflict experienced by some principals. One referred to difficulties encountered by some with records as outstanding teachers but who lacked expertise in financial matters while the other estimated that between one-quarter and one-third of principals were unwilling to accept the additional freedom and autonomy which they now possessed. This unwillingness was manifested in the strict adherence to the centrally-determined scale of issue rather than the use of discretion to reallocate through transfer. A third central office administrator recalled frustrations experienced by some principals who endeavoured to set up their own set of books. One administrator referred to the resentment felt by some principals when supervisors opposed expenditures, with a typical example being the principal who sought items at sale prices but the supervisor saw disadvantages in the lack of service available from and for such items.

The problems perceived at the school level by central office administrators largely concerned role. Those recalled by the principals were mostly associated with procedures for the administration of the budget. These are summarized in Table 61.

Principals recalled no problems encountered by teachers and secretaries other than the consequences of those summarized in Table 61. Two central office administrators perceived that teachers encountered problems through lack of involvement in the budgeting process in some schools.

Table 61

Problems Reported by Principals during Implementation in Calgary Separate

Stage	Description of Problem	Frequency (N = 5)
Preparation	Lack of experience in estimating expenditure	1
Administration	Purchasing: delays, coding	2
	Transfers: delays	2
	Control: problems of over and under-expenditure	1
	Accounting: procedures, difference between estimated and actual prices	2

CURRENT BUDGET PRACTICE

Preparation of Budgets

This section focuses on procedures adopted at each level for the preparation of the 1977 budget. Comparisons will be made, where appropriate, with practice in previous years. The preparation process is analyzed from the perspectives of time, task, and personnel involved at each of the central office, school, and Board levels.

Central office. The scale of issue to be recommended to the Board is determined annually by the Executive Council after consultation with the various Principals' Councils. These procedures have remained virtually unchanged since the time of centralized budgeting. Table 62 illustrates the scale of issue for elementary students in 1976. Additional sums are provided at the junior and senior high levels for other items and for Industrial Arts, Home Economics, and Technical Education programs. The total per pupil allocations in 1976 at the elementary, junior and senior high levels were $38.86, $61.76 and $46.19 respectively for schools offering all programs at each level.

The scale of issue has been adjusted incrementally since the time of centralized school budgeting. The present Secretary-Treasurer, in a recent report to the Board, summarized the purpose of the scale and its "tenuous" relationship to actual expenditure in these terms:

> Throughout the years, Administration has persisted in bringing to the Trustees at budget time an allocation based on specific program identification which was in line with an early pattern of costing out the actual texts used in each

Table 62

Scale of Issue for Elementary Schools in Calgary Separate for 1976

Budget Item	Amount per pupil ($)
Postage	2.00 per class
Office supplies	12.95 per class
Instructional supplies:	
- General	75.00 per class
- Science	1.50
- Physical Education	1.50
- Fine Arts	2.75
Supplies for issue	2.75
Textbooks:	
- Language Arts	6.51
- Second Language	.26
- Mathematics	1.75
- Science	1.00
- Social Studies	1.75
- Religious Education	1.25
- Physical Education	.15
- Fine Arts	1.25
Library and A.V. Materials:	
- Library books	8.00
- Maps, globes	30.85 per class
Furniture:	
- Furniture and equipment	1.63
Transportation	2.50
Total	120.80 per class 34.55 per pupil

> course and supplies that were necessary. As the curriculum has evolved and the number of options has expanded tremendously, the direct program cost has become very tenuous. The annual budget proposal has been brought forward in this consistent manner so that the budget allocation will conform to the Program Accounting and Budgeting format of the province, and also with the assumption that, given a proper base obtained a few years ago, the application of a fair cost of living increase to each of these standards should result in a reasonable allotment to each of the schools. . . .
>
> . . . .
>
> It should be emphatically stated that the . . . Scale of Issue, as it is outlined on a subject basis, does not have a direct relationship to the needs of that curriculum in any individual school in our system, although, on average, for the district as a whole, over a period of time there will be some relationship to the sums outlined, but the more relevant figure is the adequacy of the total per pupil allocation to each school.

The other major task of central office personnel during the preparation of school budgets, apart from determining staffing patterns and the routine tasks of preparation of forms and guidelines, is to examine requests made by schools for replacement of equipment and for major and scheduled repairs to buildings and grounds. Officers in the business administration department verify condition and costs after which recommendations are made by the appropriate administrator on the basis of need and funds available.

School. The preparation of a list of priorized requests for equipment replacement and repairs to buildings and grounds is the only involvement of school personnel in the preparation of the System budget except for the opportunity afforded principals to make recommendations on the standardized scale of issue at meetings of the Principals' Councils.

Board. The Board does not consider budgets for individual schools. The system budget includes amounts derived from: (1) the scales of issue discussed above, (2) staffing based on a teacher-pupil ratio determined annually, and (3) the total of capital costs recommended for equipment replacement and repairs to buildings and grounds.

A separate budget document is prepared for each school following the adoption of the system budget. These are produced by computer and show the various amounts for the controllable (non-staff) and non-controllable (staff) expenditures on the basis of anticipated student enrolment.

Administration of Budgets

The essence of decentralized school budgeting in this system lies in school discretion to reallocate funds provided in the controllable section of its budget. This section provides information on these procedures for the 1976 budget in respect to transfer, carrying forward, purchasing, control and reporting. Changes which have occurred since the adoption of the practice are described, especially those since the appointment of the present Secretary-Treasurer in 1974.

Transfers. Transfers are no longer required for the controllable portion of a school budget. Until 1975 any variance from the scale of issue required the personal signature of the Director of Education who considered this an unnecessary burden of work since, in virtually every instance, the transfers requested by principals were justified.

One central office administrator and one principal identified the new Secretary-Treasurer as a major force for change in procedures related to transfer. The Secretary-Treasurer, who holds a Master of Business Administration degree and is a Chartered Accountant, used the term "management by exception" to describe this and other changes made since 1974 to reduce the work load associated with control of expenditure but, at the same time, hold principals accountable for the outcomes of their decisions.

Current policy permits principals to expend funds from the controllable part of their budgets subject only to the limits of the lump-sum total of the scale of issue. Transfers within the non-controllable (staff) portion may be made but the discretion is tightly controlled. Each school is allocated a specific number of teachers according to the teacher-pupil ratio set out in the system budget. These professional staff units may be exchanged for para-professional staff units or other purposes providing the approval of the Executive Council is obtained. Such a request requires, first, the support by formal vote of a majority of professional staff at the school concerned, and second, the approval of the appropriate Coordinator. Several schools have exchanged a teacher-librarian for teachers' aides, using average salaries for these positions as a basis for exchange, but only two schools have made major changes to the staffing pattern. One senior high school is involved in a special project in alternative school organization approved by the Board while one junior high exchanged a number of professionals for non-professionals but has reverted to a more traditional pattern in 1976-77. No elementary school has made major changes in staffing patterns. The Coordinator of Elementary Education indicated that some schools had transferred funds from the controllable to the non-controllable portion of the budget to acquire an aide or had redefined the roles of aides. One principal of a senior high school recalled that he had endeavoured to reduce the number of aides in his school in order to gain more professional staff but system policy constrained such a reallocation.

Central office administrators have only an indirect role in influencing the manner in which principals use their discretion to reallocate the lump-sum of the scale of issue. The Coordinator of Elementary Education indicated that he personally met with each elementary principal twice each year to review programs and expenditures at schools. Subject supervisors for both elementary and secondary schools keep school personnel informed of trends in curriculum and provide assistance in recommending expenditures when required. One Coordinator indicated that subject supervisors were withdrawn from central office four years ago in response to pressures to reduce administrative staff but were reappointed one year later at the request of school personnel.

Principals were asked to give their perceptions of the extent to which a budget, as defined in this study, was prepared at the school level when the principal has the discretion to reallocate the lump-sum of the scale of issue. Do schools prepare "a fiscal plan for implementing school objectives, policies, and programs . . .?"

Both elementary principals described identical procedures for their schools and indicated that they perceived a similar practice in other schools at that level. Teachers with special interests were invited to submit suggestions for expenditure in January and February with the principal discussing cut-backs if the amounts exceeded the lump-sum. No formal budget document was prepared. The computer reports from central office were monitored and the balances in the various accounts were reallocated in September to expend the remaining funds. Money was diverted into areas of need which emerged from time to time.

Both junior high principals described similar procedures at their schools with one indicating that he perceived these to be general patterns, although there were variations from school to school, while the other did not feel in a position to assess practice elsewhere. In each instance the principal met with assistant principals and division heads in the early months of the calendar year to identify areas of need and to establish priorities. In neither case was a formal budget for the school adopted although one principal prepared a guide for himself while the other prepared a suggested outline of expenditure for consideration by the other administrators. One principal met with teachers in each division on a monthly basis thus permitting a year-round identification of needs while the other encouraged teachers to discuss their needs with division heads. Principals indicated in each instance that staff involvement has increased since the practice was adopted.

Both principals at the senior high level indicated that staff involvement in budgeting varied considerably among the four schools at this level. One principal described practice at his school where he met with the Business Manager and assistant principals to determine allocations which were then communicated to department heads. The allocations in the scale of issue were generally followed although funds are reallocated to areas of need when special priorities are perceived. The other principal indicated that an assistant principal responsible for finance advises department heads of allocations using a percentage distribution of funds previously agreed to by the latter. Teachers discuss their needs with department heads in each instance.

It is apparent from the analysis that no general pattern of systematic staff involvement in financial planning has emerged in this system. Administrators, department heads and selected teachers in elementary schools identify areas of expenditure early in the calendar year with reallocations made in September or October for unexpended funds.

Carrying a surplus or a deficit. Procedures for carrying a surplus were introduced in 1975 with schools permitted to carry forward the cost of an item whose value exceeded $500. This applied to orders placed in one year which were not filled until the following year with costs charged to the budget of the previous year. The amount of the carryover was reduced in the following year to $250 with policy changed again for 1977 to permit schools to carry forward twenty-five per cent of any surplus. The Secretary-Treasurer indicated that this last change may overcome the tendency of some principals to authorize expenditure near the end of a year simply because funds are available. A higher percentage was not considered because of its implication that schools may not need the money if a larger surplus has accumulated.

A policy was adopted in 1976 providing for a total carrying of any deficit in controllable funds. This action was taken in response to problems outlined in the next section of the report.

Purchasing. Elementary and junior high principals authorize expenditure from the controllable part of their budgets using standard requisition procedures or using petty cash for small items. Purchase orders are prepared at central office. Procedures differ at the senior high level where schools may issue their own purchase orders. The different practice at the senior high level was established in 1975 following the appointment of business managers.

Control. The tightly controlled expenditure from the staffing portion of school budgets was outlined earlier in this report. The Secretary-Treasurer indicated that no further expenditure can be made from the controllable portion of a school budget when a school reaches a deficit situation. One Coordinator indicated that principals frequently seek his assistance in these circumstances while the other Coordinator has an arrangement with the Secretary-Treasurer to be notified when a school approaches a deficit situation. Both coordinators routinely monitor computer reports of expenditure.

Control at the school level is facilitated by the computer expenditure reports which indicate the balance in the controllable portion of the budget. Senior high schools maintain their own financial records while junior high schools use less formal procedures to supplement the reports. There appears to be a general reliance on the computer reports at the junior high level.

Financial reports. Central office issues computerized monthly reports showing total amounts in each account determined on the basis of the scale of issue and standard staff allocations, amounts encumbered and expended, and the balance in each account. The important piece of information for all principals is the overall balance of the controllable portion of the budget.

All principals reported extensive use of the computerized reports. With one exception they were considered by respondents to be adequate and timely.

Current Problems in Budgeting

All respondents were asked to recall problems encountered in the administration of the 1976 budget and the preparation of the 1977 budget.

Problems encountered by trustees. The Superintendent reported that the Board had raised two concerns during the last twelve months. The Board requested in May 1976 that a review of the scale of issue be prepared by the Administration to consider:

> . . . the intended and actual uses of money allocated, needs and adequacy of money allocated, comparison with other jurisdictions, transfer of funds between specific designated items, and similar matters.

Three central office administrators and the Secretary-Treasurer indicated that one factor underlying the concern of the Board was a trip made in 1976 by eight principals in the system to a convention in Miami. This expenditure was made possible by a reallocation of funds within the sum included in the controllable portion of the school budgets. The Secretary-Treasurer provided a preliminary report in December 1976 outlining the history of the scale of issue and some comparisons with other systems in Alberta. He reported that the Canadian Education Association was undertaking a similar study across Canada.

The second concern of the Board, related to the first, focused on funds raised at the school level through fees. Concerns related to the extent to which the Board was providing the funds necessary for the operation of schools and the need for controls on school-generated funds.

Problems encountered at central office. The Superintendent indicated that he had not encountered problems with the practice other than his involvement in responding to the concerns of the Board. The Director of Education recalled that he had been directly involved on only two or three occasions when schools had accumulated a large deficit.

Both Coordinators indicated that the Miami convention had repercussions for their departments with one receiving a teacher complaint that he had been refused funds in the week prior to his principal's trip while the other indicated that principals of small schools were unable to consider such expenditure. One Coordinator reported problems with about six schools over two years in respect to overexpenditure, disagreements with a principal over the use of teachers' aides, and a general difficulty in influencing the course of events at the school level. The other Coordinator reported that the time-consuming process of consultation and the difficulties in obtaining information from schools constituted additional problems.

The Secretary-Treasurer indicated that a major problem was overexpenditure by some principals. He perceived a lack of expertise in financial planning at the school level but explained that the procedures used in the system tend to "buffer" the principal against the need to prepare such a plan. He reiterated the concerns of the Board and noted that one school was in a deficit situation as a direct result of the Miami convention.

Four principals perceived central office to encounter problems of the kind described above with three referring to overexpenditure and one to the issue of school-generated funds. Two principals referred to difficulties in keeping track of the increasing number of requisitions and the consequent task of accurate accounting. One principal perceived problems experienced by central office administrators when principals complained about expenditures from school accounts without the knowledge of school personnel.

Problems encountered in schools. The problems encountered at the school level as perceived by central office personnel were those reported above by the Secretary-Treasurer and Coordinators. One Coordinator added his perception that principals at the elementary level frequently lack the time to do the work and that some have reported the inadequacy of funding for early childhood programs.

The problems reported by principals are summarized in Table 63. These were mainly associated with the different aspects of the administration phase of the budgeting process. One important

Table 63

Current Problems Reported by Principals in Calgary Separate

Stage in Budgeting Process	Description of Problem	Frequency (N = 6)
Preparation	Allocation in Controllable Portion:	
	(1) Inadequate especially for small schools and for new programs	3
	(2) delays in advising allocation	1
Administration	Role: insufficient time and secretarial assistance at elementary level	1
	Purchasing: quality of items, mix-ups, delays	2
	Accounting:	
	(1) difference between estimated and actual costs	1
	(2) billing to school of expenditures initiated at central office	1
	Reports: delays and clarity	2

difference to the problems reported when the change was first adopted was the problem reported by principals at the elementary and junior high levels concerning the perceived inadequacy of the allocations in the controllable portion of the budget, especially for small schools and in situations where expenditures are required for new programs initiated at the provincial level.

Only the two principals at the junior high level identified problems encountered by teachers. Both were associated with perceived inadequacies of funding with one referring to the concerns of new teachers who are unfamiliar with budget limitations and the other noting that many of these teachers frequently do not make known their needs when allocations are being determined.

Disagreements

Respondents were asked to compare the frequency of their disagreements with persons at different levels of the system on matters related to school budgeting, and to give their perceptions of the effect decentralized school budgeting had on the frequency and severity of such disagreements.

Central office administrators. Disagreements with the Board were described as "never" while those among the four central office administrators interviewed were described as "seldom" or "never." Disagreements at the central office level typically concerned the distribution of funds to different parts of the system and differing emphases in respect to the employment of paraprofessionals. Decentralization was perceived to have had no effect on the frequency and severity of disagreements among central office administrators.

Disagreements between central office administrators and principals were also described as "seldom" or "never." Examples cited included differences in priorities in respect to the transfer of funds for paraprofessionals and convention travel. Three administrators perceived that decentralization had no effect on the frequency and severity of their disagreements with principals while one considered that disagreements were markedly reduced from the "constant conflict" when budgeting was centralized.

Principals. Principals were asked to give their perceptions of disagreements between principals generally and instructional personnel at central office, business affairs personnel at central office, assistant principals, department heads, teachers, secretaries and, in senior high schools, with business managers. Several principals were hesitant to generalize from their own experiences. The responses summarized in Table 64 indicate the frequency was generally described as "seldom" or "never" except for those with business affairs personnel at central office which three described as "occasional." The latter were typically concerned with enquiries related to financial reports such as prices charged. Two principals indicated that these were enquiries more than disagreements while another indicated that they were to be expected because of the closer contact with these persons than before decentralization. No examples of disagreements with instructional personnel at central office were cited while those with teachers typically concerned the availability of funds and differences in priorities.

Table 64

Principals' Perceptions of Frequency and Severity of Disagreements in Calgary Separate

	Frequency of Disagreements (N=6)				Perceived Effect of Disagreements (N=5)[a]					
					Frequency			Severity		
Persons in Disagreement	Often	Occasionally	Seldom	Never	Less	More	Same	Less	More	Same
Principals and instructional personnel at central office	0	1	1	4	2	0	3	2	0	3
Principals and business affairs personnel at central office	0	3	1	2	2	2	1	2	1	2
Principals and assistant principals	0	0	3	3	0	1	4	0	1	4
Principals and teachers	0	1	2	3	0	2	3	1	1	3
Principals and secretaries/business managers	0	0	0	6	0	0	4[b]	0	0	4[b]

[a] One principal had no experience in principalship prior to decentralization.

[b] Business managers are recent appointments in senior high schools.

There was no general agreement among principals on the effect of decentralization on the frequency and severity of disagreements except for those involving secretaries. While a majority of respondents considered that the effect was the "same" or "less," up to two respondents considered that the frequency and severity of disagreements involving professional staff at the school level and business affairs people at central office had increased as a result of decentralization.

OBJECTIVES AND OUTCOMES

Objectives

Formal objectives. No formal statements of the objectives of budgeting practice were located in documents reviewed in the study.

Perceptions of respondents. Central office administrators and principals were asked to give their perceptions by indicating the value placed on each of eight objectives included in the schedule. Table 65 contains a summary of responses together with perceptions of the progress which had been made toward the attainment of objectives.

Objectives generally valued highly by central office administrators (considered as having "much" or "great" value by at least three of the four interviewed) were those related to principal and teacher involvement, efficient use of funds, the reduction of the time required to meet changing school needs, and awareness of the relationship between objectives, outcomes, and costs.

Objectives generally valued highly by principals (considered as having "much" or "great" value by at least four of the six interviewed) were those related to principal and teacher involvement,

Table 65

Objectives of Decentralized School Budgeting in Calgary Separate: Perceived Value and Progress

Objective	Criterion	Central Office Administrators (N=4)					Principals (N=6)				
		None	Little	Some	Much	Great	None	Little	Some	Much	Great
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	0	1	3	0	0	0	2	4
	Progress	0	0	0	4	0	0	0	0	3	3
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	1	3	0	0	0	1	2	3
	Progress	0	1	3	0	0	0	1	3	0	2
3. To provide a more equitable allocation of funds among schools	Value	0	2	0	0	2	1	1	2	1	1
	Progress	0	2	0	0	2	1	1	3	1	0
4. To obtain more efficient use of funds allocated to each school	Value	0	0	0	3	1	0	0	0	0	6
	Progress	0	1	1	1	1	0	0	1	1	4
5. To provide schools with greater flexibility in the development of the instructional program	Value	0	1	1	0	2	0	2	0	0	4
	Progress	0	1	1	1	1	1	1	0	0	4
6. To encourage school and teacher innovativeness	Value	0	0	3	1	0	0	1	2	2	1
	Progress	0	2	2	0	0	1	1	1	3	0
7. To reduce the time required to meet changing school needs	Value	1	0	0	1	2	1	0	1	0	4
	Progress	1	0	1	0	2	1	1	1	0	3
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Value	0	0	0	2	2	0	1	1	2	2
	Progress	0	1	2	1	0	0	1	2	2	1

efficient use of funds, flexibility in program development, reduction of time required to meet changing school needs and awareness of the relationship between objectives, outcomes, and costs.

The perceptions of both groups were similar for the structured items except that a higher proportion of principals perceived a high value for the objective of flexibility. Neither group generally valued the objective of equity. Several respondents explained that standardized allocations were made prior to decentralization.

Outcomes

Table 65 included a summary of the perceptions of respondents of progress made toward attaining the objectives of decentralized school budgeting.

Objectives generally valued by central office administrators (considered as having "much" or "great" value by at least three of the four) were those related to principal and teacher involvement, efficient use of funds, the reduction of time required to meet school needs, and cost awareness. Using the same criterion, a high degree of progress was generally seen for only one of these, namely, the involvement of principals. The responses suggest that most central office administrators saw a need for more involvement of teachers in the budgeting process, more efficient use of funds, a reduction in the time required to meet changing school needs, and a greater awareness of the relationship between program objectives, program outcomes, and the costs involved.

Objectives generally valued highly by the principals (considered to have "much" or "great" value by at least four of the six) were those related to principal and teacher involvement, efficient use of funds, flexibility, reduction of time required to meet changing school needs, and cost awareness. Using the same criterion, a high degree of progress was generally seen for only three of these; namely, the involvement of principals, efficient use of funds, and flexibility. The responses suggest that at least half saw principals desiring more teacher involvement in budgeting, a reduction in the time required to meet changing school needs, and a greater awareness of the relationship between program objectives, program outcomes, and the costs involved.

The differences between the two groups are summarized in Table 66. Principals generally perceived a high degree of progress in attaining the objectives of efficiency and flexibility. Central office administrators did not generally perceive a high degree of progress for these.

SUGGESTIONS FOR CHANGE

Central office administrators and principals were asked to indicate changes they would like to see in school budgeting practice. The responses are summarized in Table 67.

Central Office Administrators

Central office administrators generally expressed a desire to maintain the existing pattern of decentralized budgeting but offered several qualifications. One supported the interest of the Board in seeking more information about the use of school-generated funds while another, considering the controversial use of funds for purposes

Table 66

Outcomes for Highly Valued Objectives in Calgary Separate

Objective	Central Office Evaluation		Principals' Evaluation	
	High Value	High Progress	High Value	High Progress
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Yes	Yes	Yes	Yes
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Yes	No	Yes	No
4. To obtain more efficient use of funds allocated to each school	Yes	No	Yes	Yes
5. To provide schools with greater flexibility in the development of the instructional program	No	No	Yes	Yes
7. To reduce the time required to meet changing school needs	Yes	No	Yes	No
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	Yes	No	Yes	No

Table 67

Preferences for Change in Decentralized School Budgeting Practice in Calgary Separate

Area of Authority	Group	Desired Degree of Decentralization More	Same	Less
School Budget Authority	Central office	0	4	0
	Principals	0	6	0
Operational Flexibility	Central office	0	3	1
	Principals	2	4	0
Carry Surplus or Deficit	Central office	0	4	0
	Principals	1	5	0

such as convention travel, suggested that more central control might be exercised over decentralized accounts. A third administrator felt that current patterns of decentralization reflected an "accountant's view" of the process and that he would prefer a more widespread decentralization of educational planning involving staff and parent groups over three years instead of the present one year budget cycle. The fourth administrator pointed to the disadvantage of provisions for carrying a deficit in that a newly-appointed principal would be burdened with the deficit of his predecessor.

The preferred state of decentralized school budgeting in five years' time incorporated the changes outlined above. One administrator, however, indicated an interest in a higher degree of decentralization, such as that in the Edmonton Public pilot project, should evidence of the value of such a change emerge.

Principals

Principals generally expressed a desire to maintain the existing pattern of decentralized budgeting. The two senior high principals, however, indicated that principals at that level are interested in extending the number of decentralized accounts to include equipment replacement and the repair of grounds and buildings. The response of the senior high principals suggests that these items are not presently perceived as being decentralized whereas the questionnaire completed in the first stage of the study indicated that these decisions were delegated to the school level during the preparation phase of the budgeting process. One principal also indicated a preference for a total carrying of a surplus and a deficit.

Three principals reported the desire of some principals to see per pupil allocations deleted from school budgets so that only a lump-sum allocation would be shown. They conceded, however, that the present system effectively provided the same discretion. One senior high principal reported dissatisfaction at that level with Board policy which gives different weights to funding for elementary, junior and senior high than are used by the provincial government in the School Foundation Program Grants. Senior high principals perceive a loss of funds from senior high to the elementary level.

The preferred state of decentralized school budgeting in five years' time incorporated the various changes suggested by principals.

GENERAL EVALUATION

All central office administrators and principals indicated that they were either "highly satisfied" or "moderately satisfied" with the current pattern of decentralized school budgeting. The distribution between the two responses is summarized in Table 68. The responses suggest that no important differences exist between the two groups in respect to the extent of their satisfaction.

Table 68

Satisfaction with Current Practice in Calgary Separate

Degree of Satisfaction	Central Office Administrators	Principals
Highly satisfied	2	2
Moderately satisfied	2	4

FURTHER DISCUSSION

The information contained in this chapter is further examined in Chapter 13, where it is consolidated with that reported for other systems included in the second stage of the study. This comparative review, presented against the theoretical background of Chapter 2 and the review of literature in Chapter 3, is organized under the following headings:

Forces Influencing the Adoption of Decentralized School Budgeting.

Objectives of Decentralized School Budgeting.

Change Strategies.

Problems of Implementation.

Preparation and Administration of School Budgets.

Operational Problems.

Disagreements in Decentralized Budgeting.

Attainment of Objectives.

Preferences for Change.

Satisfaction with Decentralized School Budgeting.

Chapter 11

CALGARY PUBLIC SCHOOL DISTRICT

The Calgary Public School District operated 189 schools in 1976-77. Its September 30, 1976, student enrolment of 83,837 was the highest of any system in Alberta. The enrolment increased by 26.8 percent for 1965-74 compared to a provincial mean increase of 15.5 percent for the same period.

Administration

Figure 2 contains an extract from the organization chart of the District showing the senior management level, the line of authority from senior management to the schools through area units of administration in the Division of Instruction, and those other persons in the Division of Instruction and Division of Support Services with major roles in the preparation and administration of school budgets.

The District adopted the main features of the structure illustrated in Figure 2 in the 1973-74 school year when area units of administration were established. Details of the previous structure and the reasons for the change are central to the analysis of decentralized school budgeting in the system and are outlined in subsequent sections of this chapter.

The Chief Superintendent retired on August 31, 1977. A Chief Superintendent Designate was appointed for 1976-77 and assumed many of the duties of Chief Superintendent as a result of his designation as Acting Chief Superintendent on January 1, 1977.

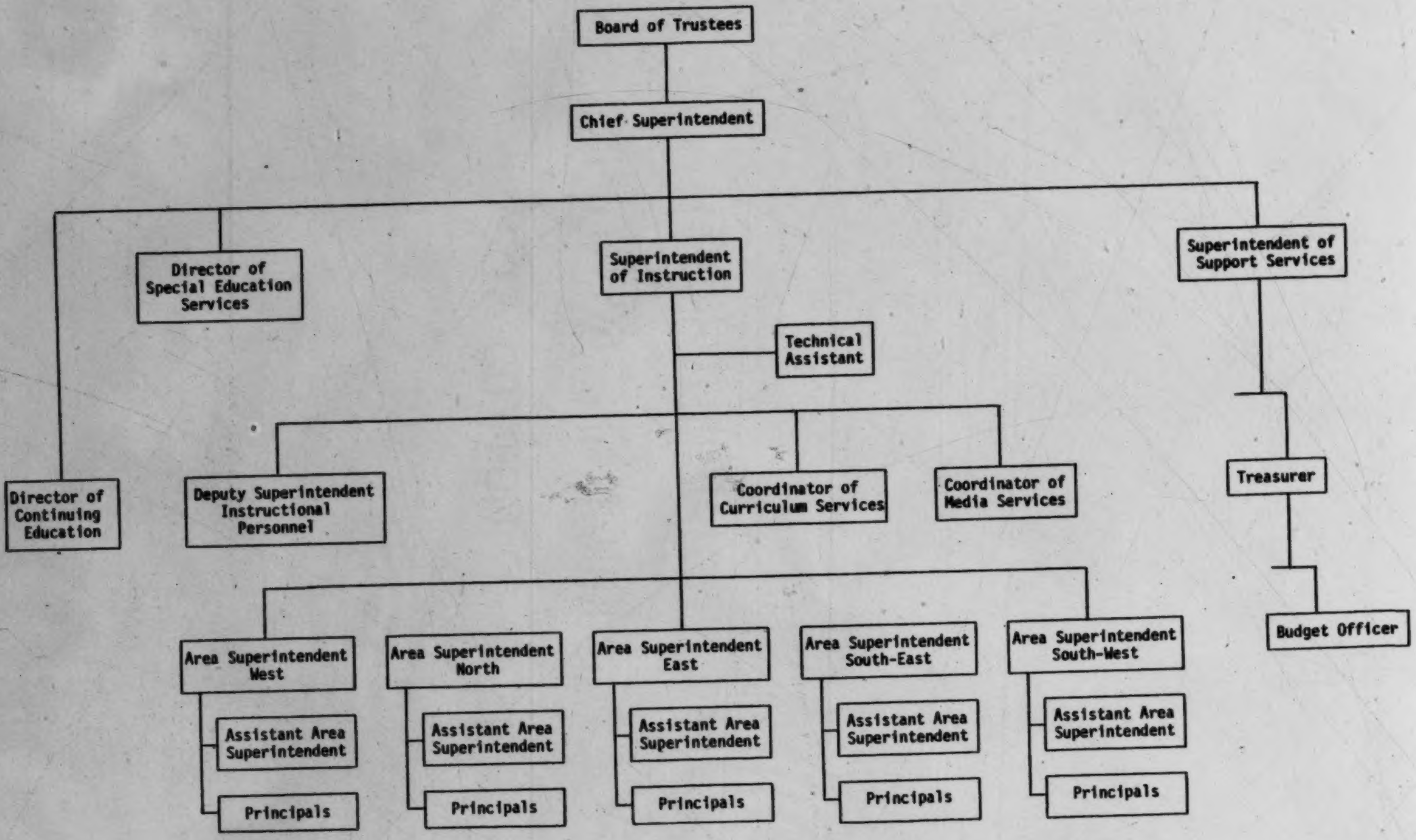
Board of Trustees
Chief Superintendent
Director of Special Education Services
Superintendent of Instruction
Superintendent of Support Services
Technical Assistant
Director of Continuing Education
Deputy Superintendent Instructional Personnel
Coordinator of Curriculum Services
Coordinator of Media Services
Treasurer
Budget Officer
Area Superintendent West
Assistant Area Superintendent
Principals
Area Superintendent North
Assistant Area Superintendent
Principals
Area Superintendent East
Assistant Area Superintendent
Principals
Area Superintendent South-East
Assistant Area Superintendent
Principals
Area Superintendent South-West
Assistant Area Superintendent
Principals

Figure 2

Lines of Authority in Decentralized School Budgeting in Calgary Public School District

Collection of Data

Interviews were conducted with eighteen persons as follows:

Chief Superintendent. The Chief Superintendent provided information on the trends in decentralization which culminated in the organizational structure shown in Figure 2. This provided the context for the analysis of forces underlying the adoption of decentralized school budgeting. He named other persons in the Divisions of Instruction and Support Services who could provide further information on the adoption and current operation of the practice.

Division of Support Services. The Superintendent of Support Services designated the Treasurer as the central office person best able to provide information on decentralized school budgeting. The Treasurer provided the names of persons influential in the decision to adopt the practice and responded to questions in the interview schedule for central office personnel. The Budget Officer, who has an important role in the preparation and administration of school budgets, was also interviewed.

Division of Instruction. The Superintendent of Instruction was identified as a person influential in the decision to establish decentralized school budgeting. He provided information on the current role of his division in addition to details of the adoption process. The Technical Assistant to the Superintendent, who has an important role in the preparation and administration of school budgets, was also interviewed.

Budget procedures assigned a major role to the five area superintendents. Three were interviewed along with two assistant area superintendents who provided information in the absence of their superintendents.

Principals. The size of the system and the research methodology precluded the selection of a random sample of principals. The Principals' Associations were abolished by the Board in 1975 thus removing an alternative used in another large system. A decision was made to interview principals who were members of three committees established specifically for purposes relating to decentralized school budgeting:

1. The Chairman of the Decentralized Budget Committee formed in 1970 to develop a pilot project in decentralized budgeting.

2. Three persons who, with the Chairman of the first committee, were principals on the Decentralized Budget Monitoring Committee established in 1973 to make recommendations for the implementation of the practice in all schools on January 1, 1974. These four persons were included in the list of those influential in adoption provided by the Treasurer.

3. Five principals who were members of the Decentralized Budget (K-12) Committee established in 1976 to continue the work of the Monitoring Committee. One member of the latter is the Chairman of the current committee.

Table 69 summarizes the persons interviewed in the District.

Other sources of information. Other information was obtained from the questionnaire completed in the first stage of the study, two program studies, two management studies, minutes of the Board, the files

Table 69

Respondents in Calgary Public School District

Level of System	Number of Respondents
Central Office	
Chief Superintendent	1
Division of Support Services	2
Division of Instruction	2
Area Offices	
Area Superintendents	3
Assistant Area Superintendents	2
Principals	
Elementary	4
Elementary-Junior High	1
Junior High	1
Junior-Senior High	1
Senior High	1
Total	18

of the first two committees named above, statements of policy and procedure, and sample school budgets.

Degree of Decentralized School Budgeting

The questionnaire completed in the first stage of the study indicated a relatively high degree of decentralization on the School Budget Authority Scale, with school decisions made on allocations for eleven of the twenty-seven items in the scale. A relatively high degree of decentralization was also indicated on the Operational Flexibility Scale. Schools had high discretion to make transfers within and between the services purchased, supplies, and capital outlay categories of school budgets. The system thus ranked in the top twenty-five percent in respect to the delegation of authority to make budget decisions before and after the adoption of the system budget.

Schools were permitted to carry forward a maximum surplus of twenty percent of their decentralized budgets and were required to carry the total amount of a deficit.

Questionnaire responses were consistent with policy and procedure observed in the system.

Decentralization Policy

Decentralized school budgeting was introduced in all schools during the same year as a major reorganization of the District. The Chief Superintendent described the change from a relatively centralized system, with separate elementary and secondary divisions, to one which included the formation of five area units of administration, an "articulated" system of education from kindergarten to grade twelve, and the encouragement of community involvement in schools. The establishment of area units was viewed as a decentralization from central office, with the Chief Superintendent stressing that the introduction of decentralized school budgeting should be regarded as just one element of such a change.

The procedures for decentralized school budgeting are set out in a PAB Manual prepared for use in the system and revised periodically.

CHANGE PROCESS

Budget Practice Before Decentralization

The following account of budget practice before decentralization was provided by the Treasurer at a 1976 seminar for potential school administrators:

> Prior to the implementation of the decentralized school budget system, three separate maximum allotments entitled "Scale of Issue" determined the supplies, equipment and personnel entitlements of elementary, junior and senior high schools. The "Scale of Issue" booklets were in two parts as follows:
>
> (a) Basic Scale of Issue for a new building which included a list of the supply and equipment allotment per classroom.
>
> (b) Annual entitlement which was a list of items available and established the ceiling for ordering using a term requisition. Pupil supplies could be ordered based on a maximum allotment per pupil and inventory on hand. Teachers' and classroom supplies could be ordered based on a maximum allotment per classroom and the inventory on hand.
>
> Elementary and junior high could only order once per year unless there was a substantial increase in pupils in September. The requisitions for certain areas such as visual education, music, physical education, etc., required approval of the appropriate subject area supervisor in central office.
>
> From the early 1950's, senior highs had their own budgets controlled by dollars. They were expected to use a term requisition based on the "Scale of Issue" for most items. However, they were also allowed to requisition the Purchasing Department to make purchases throughout the year.
>
> Overall, the "Scale of Issue" system was tightly controlled by central office personnel; allowed large bulk orders to be placed only once or twice per year; were limited to items included on predetermined lists which had very limited flexibility.

These budget procedures were administered within a structure which differed markedly with that implemented in the same year as decentralized school budgeting. The senior management group prior to

1973-74 consisted of the Chief Superintendent, Superintendents of Elementary Education, Secondary Education, Special Education, and Business Affairs; and Assistant Superintendents of Development and Research, and Adult Education. Central office administrators were dispersed to some extent with three Assistant Superintendents of Elementary Education responsible for schools in different parts of the city.

Recognition of a Need for Change

The system-wide implementation of decentralized school budgeting in January 1974 was the culmination of a planned change which began in June 1970 when the Decentralized Budget Committee was appointed to plan a pilot project in selected elementary and junior high schools. This committee was formed following the presentation of reports to Division Directors from three committees which had met independently from as early as the spring of 1969 to examine alternatives to the Scale of Issue.

Five persons provided information on the forces underlying the decision to establish the pilot: (1) Chief Superintendent, (2) the Superintendent of Instruction, who, in 1970, was Assistant Superintendent of Elementary Education and a member of the Decentralized Budget Committee, (3) an elementary principal who was Chairman of the Decentralized Budget Committee and a member of the earlier elementary committee, (4) an elementary principal who was Chairman of the elementary committee established to examine alternatives to the Scale of Issue, and (5) the Treasurer, who was a member of the committee of the Business Affairs Division which examined alternatives to the existing budget practice.

The reports of all committees were also examined.

Internal factors. Table 70 summarizes the internal factors perceived to underly the adoption of decentralized school budgeting in the system. These are not reported by frequency since each respondent was chosen on the basis of his involvement with a particular interest group.

A major influence at the elementary level was the Elementary School Program Commission established in the system from 1965 to 1975. Two recommendations (Calgary Public School Board, 1967:3) were that "there be fourteen levels of progression in the elementary school" and that "group placement of the child be determined at the beginning of each semester." The findings were implemented in a Continuous Progress Plan and through individualized instruction. The budgetary consequences were described by one respondent: "A group of us found, as Continuous Progress and Individualized Instruction got going, that the Scale of Issue did not meet these needs."

Several respondents referred to the inadequacy of the Scale of Issue for junior high schools resulting from the development of a more diverse program at that level. The Junior High Programme Commission was established in the early seventies following the decision to conduct a pilot project in decentralized budgeting. The report of the Commission (Calgary Public School Board, 1972:24) noted the trend to increased decision-making and its recommendations for the further decentralization of authority had their impact in the later decision to adopt the system-wide change in 1974.

Table 70

Internal Factors Underlying Decentralized School Budgeting in Calgary Public

Group Articulating Interest	Description of Factor
Elementary principals through Scale of Issue Committee	Scale of Issue did not meet needs of schools, especially following introduction of Continuous Progress and Individualized Instruction
Junior high principals through Scale of Issue Committee	Scale of Issue did not meet needs of schools, especially following introduction of option programs.
Business Affairs Division through committee established by Secretary-Treasurer	Difficulty in controlling supplies and equipment budgets from central office; recognition, especially by former Secretary-Treasurer, that more authority should be delegated to the school level.
Board, central office, principals and teachers	General movement in District for: (1) an "articulated" K-12 system rather than independent elementary and secondary organizations, (2) more involvement of school personnel in decision-making.

The interest of the Business Affairs Division was partly stimulated by the difficulty in controlling supplies and equipment budgets following the rapid growth in the late sixties (a consequence of an external factor). The interest of the former Secretary-Treasurer was stressed by several respondents with one noting his background as a Master of Business Administration and his view that a decentralized system of budgeting was more appropriate for the "branch organization" of a school jurisdiction.

These factors were all part of the general movement toward the improved "articulation" and decentralization described by the Chief Superintendent. Differences in budgeting were some of many which characterized the perceived disunity between the elementary and secondary divisions. One respondent also described the greater interest among educators in participative decision-making which developed in the mid-sixties.

External factors. Two external factors were identified in interviews and a review of documents. These are summarized in Table 71.

Table 71

External Factors Underlying Decentralized School Budgeting in Calgary Public

Factor	Description
Demographic	The rapid growth of population in Calgary resulting in greater work-loads in Business Affairs Division
Economic	The economic policies of the provincial government resulting in restraints on expenditure

The effect of the rapid growth of population in Calgary was noted above. The respondent identifying the economic factor referred to restraints on expenditure resulting from the economic policies of the provincial government. He recalled the view of some central office administrators that principals should be involved in making decisions on reductions in expenditure.

Decision. The reports of the three committees were received by Division Directors on June 12, 1970. A committee was established to plan a pilot project in decentralized school budgeting. Details of the pilot are contained in the next section. A decision was made by Division Directors in the spring of 1973 to implement the practice in all schools on January 1, 1974. This decision followed an evaluation of the pilot and consideration of the matter by the various interest groups.

Planning the Change

The adoption of decentralized school budgeting in Calgary Public included a clearly-defined planning phase commencing in June 1970 and concluding in the fall of 1973 following the spring decision to implement the practice in all schools. This phase focused on a pilot project which, for purposes of analysis, consisted of three stages: (1) preparation, (2) implementation, and (3) evaluation. Each stage is summarized below from the perspectives of time, task, and personnel involved. The problems encountered in the pilot are also reviewed along with the initial plans for system-wide implementation.

Information on the pilot was obtained from two reports of the Decentralized Budget Committee and an interview with its chairman.

Preparation for pilot. A committee of ten was established consisting of the Budget Officer, a representative from each of the Purchasing and Accounting Departments, the Assistant Superintendents of Elementary and Secondary Education, the Administrative Assistant in Special Education, two elementary principals and two junior high principals. An elementary principal, who was formerly Administrative Assistant to the Assistant Superintendent of Elementary Education, served as chairman.

The terms of reference were provided by Division Directors on September 4, 1970:

> That working as much as is feasible within the Elementary, Junior High, and Business Affairs Reports submitted June 12th, the committee be commissioned to prepare a decentralized budget plan for six elementary and four junior high schools for all supplies and equipment, to be completed by February 28, 1971, with the understanding that this is the first phase of the project.

The final report of the Committee was prepared in March, 1971, for presentation to the Board, central office personnel, and all elementary and junior high principals. The following is a list of the major tasks of the Committee:

1. A set of ten objectives was established for decentralized school budgeting. These are reviewed in another section of this chapter.

2. Six elementary, two elementary-junior high, and three junior high schools were selected to participate in the pilot. The criteria for selection included the type of community served and the type of school (size, age, type of instructional area, and degree of upgrading required). An examination of the special budget needs of new schools was facilitated by the selection of two schools which opened in the fall of 1971. Some of the schools in the pilot were chosen from

volunteers and included the schools of principals on the Committee while others were selected to meet the above criteria.

3. The Committee determined items to be included in decentralized budgets after consultation with subject area supervisors. Differences of opinion between supervisors and the Committee were noted in the report of the latter (Calgary Public School Board, 1971:5) which suggested a change in role for supervisors:

> The most general principle adhered to was the realization and acceptance of the individual school . . . as the agent for determining the intent and direction of specific "subject areas." This does not imply that Supervisors no longer have a hand in the development of programs. Rather, the Committee envisages a greater demand on both individual department's supervisors and consultants, as schools undertake the planning and designing of programs to meet the needs of their students.

4. The 1970 system budget was used to determine the per pupil costs of each item to be included in the decentralized budgets. These were then consolidated as lump-sum per pupil grants to elementary and junior high schools.

5. The Committee made specific recommendations that: (i) new schools should receive twice the basic grant in their first year, (ii) 1971 be selected as the base year for calculating grants in succeeding years, (iii) inflation factors be used in adjusting grants from year to year, (iv) weighted averages of September and January enrolments be used to calculate grants, (v) schools receive financial reports each month, (vi) the pilot be of two years' duration, (vii) ongoing and final evaluations of the project be made, (viii) the Committee consider expansion of the pilot to include staff, capital outlay, maintenance, Special Education and Early Childhood programs, and (ix) the Committee continue throughout the life of the project.

6. The Decentralized Budget Committee organized in-service training sessions for the project school principals commencing in December, 1970.

Implementing the pilot. The pilot began on January 1, 1971, and continued until December 31, 1973. The recommendations of the Committee were implemented except for the amounts of the initial per pupil grants, which were reduced following a decision to exclude the maintenance requirement from the decentralized budgets, and the grants for new schools, which were substantially higher than those recommended by the Committee. The basic grants were $26.02 per elementary pupil ($59.80 per pupil in the new school) and $31.03 per junior high pupil ($87.40 per pupil in the new school).

Evaluating the pilot. The pilot was evaluated in the spring of 1972. Interviews were conducted with subject supervisors and a questionnaire was distributed to all certificated staff in the pilot schools. The findings were contained in a report submitted by the Decentralized Budget Committee to the Board (Calgary Public School Board, 1972).

Important findings of the questionnaire survey included the opinion held by eighty percent of all respondents that decentralized budgeting procedures better met the needs of pupils than did the previous centralized allocation. Fewer than two percent desired a return to previous practice. A majority of respondents considered they spent more time on decisions related to program priorities and materials and that the assistance provided by central office personnel was adequate. Seventy-three percent of principals and eighty-eight percent of teachers considered that the involvement of teachers in the decision-making process was adequate. Ten of the eleven principals reported they spent more time on record-keeping and that financial statements prepared at central office by computer were inadequate.

Supervisors generally agreed with the principle of decentralized budgeting but raised problems which might be encountered with system-wide implementation. These included the future role of supervisors, increased costs due to a decrease in bulk purchasing, use of equipment by community groups, and difficulties in maintaining inventory levels. Supervisors generally felt that maintenance and upgrading should remain centralized and an "Approved Items for Purchase List" should be prepared.

The Committee recommended that system-wide implementation should not take place in 1973 unless at least eighty percent of elementary and junior high principals indicated support. Each principal at these levels was asked in June 1972 to indicate their preferences with sixty-four percent of elementary principals and fifty-nine percent of junior high principals indicating their desire to participate in 1973. The Committee decided, as a consequence, to recommend that participation be voluntary for 1973. It was subsequently decided to continue the pilot until December 31, 1973, with a decision being made in the spring of 1973 to implement the practice in all schools on January 1, 1974.

Problems experienced in pilot. The Chairman of the Decentralized Budget Committee was asked to recall the major problems encountered at the school and central office levels during the implementation of the pilot. Principals experienced difficulty with the information provided by the Business Affairs Division since the computer reports were up to two or three months behind at times. This problem was alleviated to some extent by the records kept at the schools. Another problem, which has proved perennial, was the lack of provision in decentralized budgets for texts required in new programs authorized by the Department of Education or the Board.

Apart from the problem of reporting noted above, the major problem experienced at central office was perceived to be resistance to the change from persons who previously had budget responsibilities. Some supervisors were concerned that the standards of instruction may deteriorate and programs may be downgraded.

One problem encountered at both levels was the determination of items which may be included in decentralized budgets. Contentious areas included maintenance of buildings, audio-visual equipment, and staffing, all of which remained centralized.

The Treasurer explained another difficulty during his presentation to potential administrators in 1976. In addition to operating the dual budgeting procedures during the pilot, the system was also faced with the complexity of Program Accounting and Budgeting which was introduced in 1973. This created problems which:

> . . . resulted in the Finance Department recommending that commencing January 1, 1974, a full system-wide decentralized budget system be commenced for all elementary and junior high schools because having only some of the schools on a full decentralized budget system was fragmenting the entire accounting operation.

The Treasurer perceived, however, that PAB facilitated decentralized budgeting.

Planning for implementation in all schools. The Decentralized Budget Committee continued its work following the decision in early

1973 to implement the practice in all schools in 1974. It served as a steering committee to establish plans for budget submissions, conversion, controls, transfers, training seminars, and preparation of school budget manuals.

Implementing the Change

The implementation phase of the change process was formalized with the appointment of the Decentralized Budget Monitoring Committee in October, 1973. The purpose of the Committee (Calgary Board of Education, 1975:1) was:

> (a) to make recommendations to the Administrative Council of the Calgary Board of Education for changes in the basic guidelines for the decentralization of budgeting and purchasing procedures,
>
> (b) to assist personnel within the Board's schools and administrative offices to implement the required procedures to insure the smooth operation of the system.

The ten-member Committee was chaired by an elementary principal who was formerly Chairman of the Decentralized Budget Committee. Other members were an elementary principal, junior high principal, and senior high principal; representatives of the Data Processing, Accounting, and Purchasing Departments; two representatives from the Division of Instruction; and a former principal of a pilot school who served as a consultant to the Committee.

In-service activities. Fifteen days were devoted to in-service activities commencing on September 26, 1973, and concluding on April 3, 1974. These consisted of three sets of one-day seminars held in each of the five areas of administration, one day at the Calgary Teachers' Convention, and two days of seminars for those unable to attend earlier sessions. Separate sets of seminars were conducted for principals, assistant principals, and school secretarial staff.

The seminars were conducted by members of the Monitoring Committee. Each seminar consisted of two half-day sessions devoted to examination of two basic packages prepared with the assistance of persons in the Division of Support Services. These packages contained information relating to procedures for budget preparation, requisitioning, and record-keeping.

Changes at central office. Information concerning the implementation of change at the central office was provided by the Superintendent of Instruction and his Technical Assistant, the Treasurer, and the Budget Officer.

The implementation of decentralized school budgeting coincided with the major district reorganization described earlier in the chapter. Many of the changes in structure, role, and personnel which occurred at the time were largely a consequence of that reorganization. There were, nevertheless, several changes which accompanied the adoption of decentralized school budgeting. The major changes in the Division of Instruction were concerned with the preparation and administration of budgets and the role of subject supervisors. Prior to decentralization the Divisions of Elementary and Secondary Education (with the exception of senior high schools and junior high vocational schools) were only concerned with the quantities associated with the Scale of Issue. Following decentralization, the Division of Instruction was responsible for recommendations on: (1) the amount of the different per pupil grants, (2) the items which may be included in decentralized budgets, and

(3) the composition of the Approved for Purchase List distributed to schools. These matters and others related to the administration of school budgets necessitated the appointment of a Technical Assistant to the Superintendent of Instruction. This person was formerly an accountant in the Business Affairs Division and later, the Technical Assistant to the Assistant Superintendent of Elementary Education.

The Superintendent of Instruction reported that the role of subject supervisors "changed quite dramatically," from one where line control was exercised over programs and allocations to schools to a staff position involving discussions with schools on the direction of programs, instructional materials, and general supervision. Supervisors also monitored computer financial statements and discussed difficulties directly with principals.

The implementation of decentralized school budgeting necessitated major changes in role in the Division of Support Services (formerly the Business Affairs Division). Prior to decentralization, the Purchasing Agent was primarily responsible for the allocation of supplies and equipment to schools under the Scale of Issue. Communications mainly concerned procedures for the delivery of goods. Following decentralization, personnel in the Treasurer's department were required to develop forms and procedures for budgeting, purchasing, accounting, and reporting for each school location. The Treasurer was personally involved in writing the PAB Manuals which were introduced in 1973 and were central to the implementation of decentralized school budgeting. The additional time required for the preparation and administration of school budgets required, in the judgment of the Treasurer, the employment of the equivalent of one additional full-time person.

The Budget Officer was responsible for distributing the necessary forms and guidelines to schools following the determination of the amount of the various grants by the Division of Instruction. School budgets were submitted by area superintendents to the Division of Instruction where appropriate checks of amounts and adherence to guidelines were completed. The budgets were then forwarded to the Division of Support Services where they formed the basis of the various control procedures. Full details of these and other procedures are contained in the section of the chapter which describes current practice.

The role of the area superintendent. The definition of central office administrators adopted for this study included those professional educators working in area offices in a school system. The responses of area superintendents are, however, considered separately in the analysis because of the special role of these persons in the budgeting process.

The appointment of area superintendents was a major feature of the district reorganization which followed a management study prepared for the Board in 1973. The study (Calgary Public School Board, 1973a:46) recommended the area superintendency and specifically related the role to decentralized budgeting:

> . . . the task of coordinating over 180 school principals is beyond the capacity of one person and, one way or another, the Deputy Superintendent[1] will have to delegate some of his responsibilities to others.
>
> When selecting the basis of specialization for delegating responsibility from the Deputy Superintendent to subordinate roles, the trends toward decentralized budgeting and community involvement, as well as the communication gap between the central office and the schools, must be taken into account.

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[1] The Deputy Superintendent described in management study was designated as Superintendent of Instruction in the subsequent reorganization.

> A regional form of organization, in which Area Superintendents act on behalf of the Deputy Superintendent of Schools in specified segments of the school system, will satisfy these criteria.

The management consultants who conducted the study also proposed an assistant to the area superintendent with duties specifically related to the decentralization of budgets. One consultant, in responding to a question from a trustee (Calgary Public School Board, 1973b:7) stated that:

> . . . it had been [the consultants'] experience in other school jurisdictions where the area approach had been used, that in the implementation period, the area superintendent had experienced some difficulty not only in the K-12 approach, but also in the handling and control of the budgets. These would eventually be shifted in the main to the School Principals after the implementation period. However, in order to make the transition as smooth and effective as possible, it is recommended that an assistant be appointed to the Area Superintendent for at least the initial two year period.

The budget documents prepared at the school level were submitted to area superintendents who ensured that allocations were consistent with financial and curriculum guidelines. Budgets were then forwarded to the Superintendent of Instruction for final approval.

Details of the procedures employed by area superintendents in the preparation and administration of school budgets are contained in the section of the chapter which is concerned with current practice.

Changes at the school level. Principals were required to prepare a formal document showing how the different per pupil grants were to be allocated to the various PAB categories in the decentralized budgets. These were then submitted to area superintendents as outlined above. Details of the procedures employed in the preparation and administration of budgets are set out later in the chapter.

Information concerning the changes in role at the school level was provided by principals who were members of the Decentralized Budget Monitoring Committee and principals who are currently members of the Decentralized Budget (K-12) Committee. Elementary principals recalled little teacher involvement in budgeting in the first year with the budget usually prepared by the principal or, in many instances, the assistant principal, who had traditionally been responsible for submitting the term requisition for instructional supplies. The school secretary was usually responsible for record-keeping. Junior high principals recalled differences at that level in the extent to which teachers were involved.

Senior high schools had their own budgets since the early fifties. There were changes, however, with the system-wide implementation of decentralized budgeting in 1974. Procedures similar to those used for elementary and junior high schools were employed at central office to calculate the amount of the per pupil allocations and standard forms were introduced. Budgets were submitted to area superintendents. No major changes in role were reported with procedures for purchasing and record-keeping in place from former years. Most senior high schools had the assistance of a business manager. The budget was usually prepared by the principal or the assistant principal working with department heads to determine the various allocations.

The role of the Monitoring Committee. The terms of reference for the Decentralized Budget Monitoring Committee and its role in conducting in-service seminars were set out above. This committee was formed on October 19, 1973, and submitted its final report to the Board in April, 1975. Following the in-service activities, members of the Committee provided assistance to schools as the need arose and prepared recommendations with respect to guidelines, adequacy of grants, financial reports, and areas of school budget responsibility. Interim reports were submitted in April and December 1974. The Committee reported to the Administrative Council which, at that time, consisted of the Chief Superintendent, the Superintendents of Instruction and Support Services, and the Directors of Continuing Education and Special Education Services.

Problems of Implementation

All respondents, with the exception of the Chief Superintendent, were asked to recall problems encountered during the first year of implementation.

Problems encountered by the Board.

One central office respondent identified two problems encountered by trustees. One was reflected in concerns that the per pupil grants were not meeting the needs of small schools while the other was a lack of familiarity on the part of some trustees with the new role of supervisors.

Problems encountered at central office.

The Division of Instruction encountered three problems in the administration of school budgets: (1) coding errors made at the school level, (2) differing interpretations of the definition of equipment, and (3) violation of purchasing procedures by school personnel. Some resistance to the change on the part of subject supervisors was also perceived.

The major problem for the Division of Support Services was associated with the preparation of adequate financial reports for schools.

One central office respondent observed that without adequate reporting "you have no chance of success as far as decentralization is concerned." It took some time before the technology was acquired to produce adequate and timely reports. The second major problem encountered in this Division was the problem of incorrect coding and differing interpretations of terms.

The perceptions of area superintendents and principals with respect to problems encountered at central office generally coincided with those set out above. One area superintendent considered that many of the problems were a consequence of a lack of familiarity with procedures. Another recalled a problem of obtaining agreement on items to be included in decentralized budgets. One principal made these same observations while another referred to the Purchasing Department being "swamped" with different purchase requests in the first year, necessitating the preparation of standard lists of equipment and supplies.

Problems encountered by area superintendents. Two area superintendents recalled problems associated with their new roles such as the development of procedures for checking budgets and difficulties with PAB codes. Two could not recall problems at this stage of the change process. One area superintendent did not have an area position in the first year of the change.

Two principals perceived that area superintendents encountered problems associated with their roles. One recalled that there was a lack of familiarity with budgeting procedures while the other perceived a general questioning of their role.

Problems encountered in the schools. The frequencies with which each type of problem experienced by principals was reported are summarized in Table 72. Only two problems were specifically related to the type and level of schooling with one principal referring to difficulties experienced by small schools whose special needs were not met by the uniform per pupil allocation while a senior high principal referred to differences in opinion on allocations for academic and vocational programs at the senior high level.

The problem reported most frequently was that related to the lack of experience of principals with all phases of the budgeting process.

Only two principals identified problems encountered by teachers. One recalled a difficulty in establishing a role with some principals not involving staff while others were perceived to place an unnecessary burden on teachers. The other principal recalled the frustration of some teachers with the delay between ordering and delivery. One principal reported that secretaries were faced with additional record-keeping as a result of decentralization.

The role of the Monitoring Committee. The Monitoring Committee identified many of these problems through correspondence and personal contact with principals. The two interim reports and the final report contained recommendations for change, including special provisions for small schools which encountered difficulties with the amount of the grants.

Table 72

Problems Encountered by Principals During Implementation in Calgary Public

Stage in Budgeting Process	Description of Problem	Frequency		
		Principals (N=7)	Area Superintendents or Assistant Superintendents (N=5)	Central Office Personnel (N=3)
Preparation	Role:			
	(1) lack of experience	3	2	1
	(2) reluctance to accept role	1	0	1
	(3) supervisors specifying allocations	1	0	0
	Allocations:			
	(1) inadequate for small schools	1	0	0
	(2) different opinions on academic and vocational grants	1	0	0
	(3) definition of items	0	0	1
	(4) the requirement that budgets be prepared before needs are known	1	0	0
Administration	Role:			
	(1) lack of experience in purchasing and accounting	3	2	1
	(2) burden of work with record-keeping	0	0	1
	Accounting:			
	(1) Problems with surplus and deficits	3	0	0
	Purchasing:			
	(1) coding difficulties	1	1	0
	(2) poor judgment by some principals	1	0	0
	Reporting:			
	(1) delays and difficulties in reading statements	1	1	1

Stabilizing the Change

A stabilization phase appeared to be achieved in 1976 with the implementation of changes suggested by the Monitoring Committee and the appointment of a new committee to monitor the practice. The new committee, formally titled the Supplies and Equipment Catalogue and Decentralized Budget (K-12) Committee, recommends changes to basic lists of supplies and equipment in addition to fulfilling a monitoring role for decentralized budgeting. The Committee is chaired by an elementary principal, who was a member of each of the two previous decentralized budget committees, four principals representing different areas in the system and different types of schools, the Administrative Assistant to the Superintendent of Instruction, and a buyer from the Division of Support Services.

CURRENT BUDGET PRACTICE

Preparation of the Budget

This section provides information related to the preparation of the 1977 school budgets. The process is analyzed from the perspectives of time, task, and personnel involved at each of four levels; namely, Board, central office, area office, and school.

Board. The Board has no direct role in the preparation of school budgets. The total of all decentralized budgets is included in the system budget presented to the Board for its consideration. The Board retains the right to review the budget of a particular school should this be considered necessary.

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Central office. The amount of the per pupil allocations is determined by the Administrative Council on the recommendation of the Superintendent of Instruction. The amounts for 1977 are set out in Table 73 and include the sliding scale factors to assist small schools introduced for the first time in 1976 on the recommendation of the Monitoring Committee. The Administrative Council now receives recommendations from the Decentralized Budget (K-2) Committee on items to be added to or removed from the decentralized budgets.

The Technical Assistant to the Superintendent of Instruction calculated the amount of the grant for each school using a weighted average of student enrolments for September 1976 and the anticipated enrolment for September 1977. Budgets were prepared by schools and submitted to area superintendents in the manner outlined below. The area superintendents returned budgets to the Superintendent of Instruction for a final check to ensure that district policy and guidelines had been observed.

The Division of Support Services, through the Budget Officer, was responsible for communicating the budget guidelines to schools. Forms were distributed in September.

Respondents in the Division of Instruction were not asked to give their perceptions of the effect of decentralized school budgeting on the amount of time spent by Division personnel on preparing school budgets. The major reorganization of the Division which occurred in 1973, particularly the appointment of area superintendents, precluded such a judgment, although the assignment of matters related to school budgets to the Technical Assistant suggested that more time was required.

Table 73

Amount of 1977 Per Pupil Allocations in Calgary Public

Type of School	Base Grant Enrolment	 Amount ($)	Sliding Scale Factor
Elementary	350	39.25	Decreasing to $35.32 for schools with 450 or more
			Increasing to $49.06 for schools with 100 or less
Junior High	450	50.22	Decreasing to $45.20 for schools with 590 or more
			Increasing to $62.78 for schools with 100 or less
Senior High	Maximum	56.50	Based on mix of academic and vocational programs
	Minimum	49.27	
Secondary Vocational		75.32	Uniform rate
New Schools	Added to base grant		
Elementary		70.67	
Junior High		101.40	
Senior High		No figure calculated	

The Treasurer perceived that decentralized school budgeting resulted in more time being devoted to the preparation of school budgets in the Division of Support Services.

Schools. Schools received forms and guidelines in September and were requested to submit completed budgets to area superintendents at the end of October. The total grant available to each school was determined by adding sixty percent of the September 30, 1976 enrolment to forty percent of the projected enrolment for September, 1977. Schools were required to expend no more than ninety percent of their grants for the period from January 1 to August 31 with ten percent held back for redistribution among schools to meet deviations between actual and projected enrolments.

Budgets required supporting detail for furnishings and equipment, that is, for items included in the furnishings and equipment catalogue or non-consumable items costing over $50.

A variety of procedures were used to prepare budgets in the schools. The three elementary principals interviewed described practices ranging from teacher committees organized by subject or division to that in which the principal determines the allocations. It was a common practice for the assistant principal to be assigned responsibility for budget preparation. One principal described a trend in many schools from a high degree of teacher involvement when the practice was first implemented to a low degree once expenditure patterns became established and the task was perceived to be routine. Another principal stated that the extent of teacher involvement was partly dependent on the leadership style of the principal.

Similar diversity existed among junior high schools. Both principals perceived that many schools used average district allocations for each subject as a guideline in budgeting. A suggested percentage allocation distributed in earlier seminars has also been used. One principal indicated that smaller schools frequently use a single staff meeting to finalize allocations.

The two senior high principals who were interviewed described what they perceived to be a common practice wherein department heads submit estimates to either the principal or an assistant principal responsible for budgeting. Teacher involvement may be encouraged by department heads. Reductions were made by discussion on an individual basis or at a meeting of administrators or department heads. One principal reported that a small number of senior high principals personally determined allocations and advised department heads accordingly.

Schools in some areas of the district were required to submit a narrative or statement of objectives to their area superintendent. Details of such procedures are given below.

Principals were asked to indicate their perceptions of the effect of decentralized school budgeting on the amount of time spent by school personnel on the preparation of budgets. Most reported that all except teachers devoted more time. Four of the seven respondents perceived that teachers devoted the same amount of time to this task. One of the two senior high principals perceived that all staff at this level except principals and secretaries spent the same time on the preparation of budgets. Principals and secretaries were perceived to spend more time. The responses are summarized in Table 74.

Table 74

Principals' Perceptions of Effect of Decentralization on Time Spent by School Personnel on Preparation of Budget in Calgary Public

Persons Involved in Preparation	Perceived Effect of Decentralization More Time	 Same Time	 Less Time	 Not Applicable
Principal				
By self	7	0	0	0
With school personnel	6	1	0	0
With central office personnel	5	2	0	0
Other School Personnel				
Assistant principals	6	1	0	0
Department heads	5	1	0	1
Teachers	3	4	0	0
Business Managers	1	1	0	5
Secretaries	7	0	0	0

Area superintendents. The Superintendent of Instruction indicated that the procedures employed by area superintendents varied but that each was expected to ensure that school budgets were consistent with system policy and curriculum guidelines.

Five distinctive practices were described by the area superintendents and assistant area superintendents who were interviewed. These differed with respect to the nature of the supporting materials required from principals and the review procedures which were adopted. With one exception, where budgeting was delegated to the assistant, the task was shared by the superintendent and his assistant.

One superintendent required principals to prepare a "priority" report to accompany budgets and an "accomplishment" report to be submitted at the end of the school year. The priority report outlined the special needs and priorities reflected in the budget and replaced an earlier requirement that school goals and objectives be submitted. It was found that goals and objectives tended to be a duplication of those adopted for the system as a whole. Each budget was checked for accuracy and conformity with system policy. Expenditures perceived to be inappropriate were discussed with principals. The Superintendent or his assistant reviewed the accomplishment reports for 1976 with each principal during the preparation of the 1977 budgets. These reports summarized the extent to which the needs and priorities submitted earlier had been attained.

Another superintendent and his assistant visited schools in April to discuss staffing, budgeting, and proposals for change in the forthcoming year. Principals were required to submit explanations for any major changes in allocation. Each budget was checked, percentage breakdowns calculated, and suggestions for change discussed individually.

The Superintendent in one area required principals to submit a budget narrative consisting of goals and objectives for each program. He has conducted seminars related to budget practice and the relationship between an educational plan and the budget. Each budget was compared to that submitted in previous years. Inappropriate allocations were discussed with principals.

One superintendent did not require principals to submit supporting documentation. The Assistant Superintendent examined budgets and made comparisons with those submitted in previous years.

The fifth superintendent also did not require documentation. Principals were kept informed of curriculum changes and checks were made to ensure that these were reflected in budgets. Additional secretarial assistance was obtained for three days to check the accuracy of budgets and to calculate the allocations on a percentage basis. Each budget was discussed personally with principals in the first two years but copies are now mailed back except for new principals or where errors have been found. A half-day seminar on budgeting is conducted annually in this area.

Two superintendents recalled a general reliance on district averages or suggested allocations during the first year or two of the practice but observed a trend to greater flexibility as principals and staff became familiar with the process.

Administration of the Budget

This section provides information on the procedures employed in the administration of the 1976 and 1977 budgets in respect to transfer, carrying forward, purchasing, control, and reporting.

Transfers. District policy required that transfers between decentralized accounts must be made to cover: (i) overexpenditures in furnishings and equipment accounts or requests for additional furnishings and equipment not included in the original budget, (ii) the deletion of an item of equipment and its replacement by another in the same or another equipment account, and (iii) any overexpenditure in a decentralized account.

The approval of the area superintendent was required for all transfers related to furnishings and equipment. The principal was permitted to make any other allowable transfers between decentralized accounts to a maximum of $1,000 for each account in any one year. The area superintendents have authority to approve transfers to $5,000, the Superintendent of Instruction to $10,000, and the Chief Superintendent to $50,000. All requests for transfer must be prepared on a standard form and submitted to the Budget Officer.

Carrying forward. Schools were permitted to carry forward a maximum surplus of twenty percent of their decentralized budgets. The full amount of a deficit must be carried forward but schools were not permitted to plan a deficit. Any school in a deficit position during a budget year may be restrained from further spending. A surplus or a deficit in excess of $1,000 must be allocated in the following year to specific budget categories other than General Instruction subject to the approval of area superintendents.

Purchasing. Schools may purchase using standard requisition forms submitted to central office or, for purchases less than $25 ($150 in senior high schools), by using a School Self-Pay Purchase Order.

The system has established an equipment exchange program which permits schools to sell surplus equipment to other schools at prices established by the Purchasing Department. This procedure was instituted on the recommendation of the Decentralized Budget Committee.

The principal is the signing authority for all purchases from decentralized budgets.

Principals were asked to indicate their perceptions of the effect of decentralized school budgeting on the amount of time spent by school personnel on purchasing. Most reported that all devoted more time. The only exceptions were for senior high personnel where one principal perceived the same amount of time spent by professional educators at that level, and one principal who perceived elementary personnel to spend the same amount of time. The responses are summarized in Table 75.

Table 75

Principals' Perceptions of Effect of Decentralization on Time Spent by School Personnel on Budgeting in Calgary Public

	Perceived Effect of Decentralization			
Persons Involved in Purchasing	More Time	Same Time	Less Time	Not Applicable
Principals	5	2	0	0
Assistant Principals	4	3	0	0
Department Heads	4	2	0	1
Teachers	5	2	0	0
Business Managers	2	0	0	5
Secretaries	6	1	0	0

Control. The procedures for transfer and purchase set out above define the methods for control of expenditure. The control process at the school level was facilitated by the financial reports distributed by the Division of Support Services, discussed below, and records maintained at the school level. Manual budget records were kept at each school in the first year of decentralized budgeting on the recommendation of the Monitoring Committee. The Division of Support Services recommended in 1976 that schools rely exclusively on the computer-produced reports. The Division provided special forms for schools choosing to maintain their own records.

School records were maintained by secretaries except in senior high schools where a business manager was employed.

Principals were asked to indicate their perceptions of the effect of decentralized school budgeting on the amount of time spent by school personnel on record-keeping. Most reported that principals, assistant principals, business managers (in senior high schools), and secretaries spent more time. Teachers, who have not traditionally been involved in this task, were perceived to spend the same amount of time. Respondents were equally divided in their perceptions as to whether department heads spent the same or more time on record-keeping. The two senior high principals considered that professional educators at that level spent the same amount of time except for one principal who perceived that principals spend more time. The responses are summarized in Table 76.

Reporting. Two computer-produced expenditure reports were distributed to schools at the end of each month. One summarized expenditures and transfers, during the month and since the start of the budget year, for each budget category. The other provided a detailed listing of the various expenditures during the month in each category.

Table 76

Principals' Perceptions of Effect of Decentralization on Time Spent by School Personnel on Record-Keeping in Calgary Public

Persons Involved in Record-Keeping	Perceived Effect of Decentralization			
	More Time	Same Time	Less Time	Not Applicable
Principals	6	1	0	0
Assistant Principals	5	2	0	0
Department Heads	3	3	0	1
Teachers	2	5	0	0
Business Managers	2	0	0	5
Secretaries	7	0	0	0

The Treasurer indicated that personnel in the Division of Support Services devoted more time to this and other tasks in the administration of budgets as a result of decentralized school budgeting.

CURRENT PROBLEMS IN BUDGETING

Information in this section of the chapter is drawn from two sources: (1) interviews with all respondents other than the Chief Superintendent, and (2) a management study (Calgary Board of Education, 1977a) prepared for the Board in 1977.

Problems Identified During Interviews

Problems encountered by Board. Two problems encountered by the Board were reported during interviews with central office personnel. One was a concern at the total surplus in the decentralized accounts of $275,000 in 1975 and $277,000 in 1976 from a total decentralized budget of approximately $3,000,000 in each instance. The second was a perception that some members of the Board were not familiar with the redistribution of authority between supervisors and principals with respect to the allocations for some budget categories.

Problems encountered at central office. The Chief Superintendent personally encountered no problems with decentralized school budgeting. Problems were dealt with at other levels of the central office administrative staff. He was aware of concerns related to communications expressed by some school system personnel and indicated that these were being investigated within the context of the management study.

Other central office personnel reported problems arising from coding errors and violations of purchasing guidelines at the school level but these were perceived to occur less frequently than during the first year of implementation. One respondent indicated that, in some instances, these problems were a result of lack of experience, a situation the Division of Support Services was attempting to overcome through seminars for potential administrators. Another respondent expressed concern at the view held by some principals that the advantages of decentralized school budgeting have been offset by the burden of work in the administration of budgets.

Three area superintendents described problems encountered at central office. Two referred to the difficulties created by the coding errors and the violation of purchasing guidelines at the school level while one perceived the problems to be a consequence of an apparent incompatibility between the interests of accounting and education. One area superintendent described the difficulty in determining annual increases in per pupil allocations when inflationary increases for some commodities exceeded the general rate of inflation. He perceived a downward pressure on the amount of decentralized allocations.

Five of the eight principals interviewed perceived central office personnel to encounter problems related to coding and guideline violation in addition to the difficulty of coping with the concerns of area superintendents and principals described below. One principal perceived a concern by several supervisors that some programs were neglected while two reported no problems at the central office level.

Problems encountered by area superintendents. Three of the five respondents in area offices reported dissatisfaction with their role in the budgeting process, especially in the administration phase. One perceived the approval of school transfers to be primarily a clerical task while another considered this to be an "annoyance involvement." The third could not see the necessity for the volume of material which related to the administration of budgets. Two respondents, however, perceived no problems with budgeting, although one indicated that he was concerned at the problems reported by principals.

Two principals perceived area superintendents to be concerned with their role while one felt that area superintendents lacked expertise in financial matters. Five principals considered that area superintendents encountered no major problems with the practice.

Problems encountered in schools. The frequencies with which each type of problem experienced by principals was reported are summarized in Table 77. The analysis shows an increase in the number of types of problems from those reported in the first year of implementation.

Three major problems were identified. The first concerned the role of the principal in preparing allocations for equipment. One principal described the burden of work in specifying each item of equipment while two area superintendents noted that equipment must be specified in October in one year for a period ending December 31 in the following year. These area superintendents observed that needs change over this time, and changes in staff (reaching an annual rate of twenty-five percent in some schools in one area) result in equipment required by some teachers not being used by their successors. One area superintendent reported that some principals declined to list many items of equipment in their budgets because they can't predict the price fifteen months prior to placing an order. Transfers are made later to acquire these items. He observed that this may be self-defeating because the advantages of bulk ordering on tender are lost. This problem was also perceived to contribute to the problems of transferability described below.

The second major problem concerned the role of the Division of Support Services, especially the Accounting Department, in the budgeting process. Respondents at each level reported the perception held by many principals that the constraints of the process were excessive

Table 77

Current Problems Encountered by Principals in Calgary Public

Stage in Budgeting Process	Description of Problem	Frequency		
		Principals (N=8)	Area Superintendents or Assistant Superintendents (N=5)	Central Office Personnel (N=3)
Preparation	Role:			
	(1) lack of understanding of purpose of decentralization	1	0	1
	(2) lack of understanding of financial matters	1	0	0
	(3) excessive amount of time required	0	1	0
	(4) excessive detail required in equipment budget, especially before need for items is known	1	2	1
	(5) decentralization of items which are best centralized	1	0	0
	Allocations:			
	(1) don't meet needs of large and small schools	1	0	0
	(2) different interpretations of guidelines for allocations	1	1	0
	(3) difficulty in matching budget and priorities	0	1	0
Administration	Role:			
	(1) lack of understanding of purpose of decentralization	1	0	0
	(2) lack of understanding of financial matters	1	0	0
	(3) constraints established by Accounting Department which are perceived to be inappropriate	3	3	2
	(4) excessive amount of time required	0	2	0
	Purchasing:			
	(1) early "cut-off" dates	6	2	0
	(2) coding	2	1	1
	(3) delays	1	0	0
	(4) violation of guidelines	0	1	1
	Accounting:			
	(1) errors in billing	2	0	0
	Reporting:			
	(1) delays	1	1	0
	(2) insufficient information	2	0	0

especially with respect to transfers. Some principals were reported as considering that the disadvantages of time spent outweighed the advantages gained by decentralization while others perceived the various constraints as meeting the PAB reporting requirements rather than the needs of schools. Two respondents felt that the Accounting Department frequently made decisions of an educational nature. Respondents in the Division of Support Services recognized these concerns and felt that many principals were not aware of the purposes and origins of decentralized budgeting in the system. One principal agreed that many principals lacked an understanding of the purpose of decentralization and of system budgeting in general.

The third major problem, and that reported most frequently by principals, was the consequence of specific constraints in the budgeting process. A series of cut-off dates was established in the fall after which no requisitions could be made for expenditure from 1976 budgets. Equipment, for example, could not be ordered after October 8, hardcover books after October 29, and warehouse supplies after December 3. An additional constraint in the purchasing procedures affected the carrying forward of a surplus. Orders which were not filled before December 31 were automatically cancelled. In many cases, the amount of money involved in unfilled orders exceeded the upper limit of the amount which could be carried forward; namely, twenty percent of the amount of a school budget, with the difference being lost to the school. The problem was particularly a consequence of unfilled orders for library books and other media materials which may be ordered as early as April. Many principals appreciated the need to place orders at an earlier time but a respondent in the Division of Support Services reported that practices in other systems were under investigation to alleviate the problem in 1977. One principal recalled that these problems were not as serious in 1975 because procedures at that time provided a longer purchasing period.

Five principals described problems encountered by teachers with decentralized budgeting. One reported a lack of involvement in some schools while in others, the burden of preparation was perceived to be heavy. Another principal stated that elementary teachers, in particular, had insufficient time for budgeting. Other principals referred to problems of orienting new teachers to the practice, the general lack of understanding of financial matters, and difficulties encountered with purchasing procedures. One principal reported that half-time secretaries in small elementary schools frequently lack the time to perform tasks related to budgeting in addition to meeting the typing needs of teachers.

Problems Identified in Management Study

A management study was commissioned by the Board in October, 1976. Much of the data collected by the management consultants were obtained in the same period as that gathered for this dissertation. The final report (Calgary Board of Education, 1977a) was received by the Board in May, 1977.

Terms of reference. The terms of reference established by the Board (Calgary Board of Education, 1977a:1) called for a study to review:

(a) the reorganization that took place in 1973 and recommend changes and improvements;

(b) the organization of the non-instructional components of the school district and recommend changes and improvements in the organization of Support Services;

(c) systems and procedures throughout the school district and recommend changes and improvements to the system.

Collection of data. The primary methods used by the consultants were: (1) diagnostic workshops with selected employees in the different departments of each Division to identify "driving" and "holding" forces using the techniques of Force Field Analysis, (2) planning workshops using smaller groups to identify underlying problems and prepare alternative solutions, and (3) a survey of organizational climate using a stratified random sample of employees in each department.

Problems identified by central and area office personnel. All departments and groups identified problems associated with decentralized school budgeting or the PAB system in Calgary Public. Area Superintendents referred to the lack of role definition for those with responsibilities while Curriculum Services reported misperceptions by the public and trustees on the role of supervisors. Curriculum Services also noted the incremental approach to budgeting on the basis of distributive formulae and inflationary factors rather than needs, and the apparent insensitivity of budget accounting procedures to educational practice. Media Services considered the PAB system to be cumbersome. The Purchasing Department was concerned at the short purchase year which resulted from delays in budget approval. The Finance Department described the constraints and inadequacies of the provincial PAB system and its reporting requirements and perceived a lack of support from the Instruction Division in enforcing procedures which were frequently violated by instructional personnel. Other comments noted in the report, for which no source was specified, included the increased workload created by decentralization, the restrictive budget guidelines, the difference between the budget year and the school year, and the perception that decentralization existed in name only. Only Curriculum Services included decentralized budgeting in a list of "driving" forces.

The problems listed above are all consistent with those mentioned during interviews conducted by the researcher.

Problems identified by principals. Principals met in area groups to identify "driving" and "holding" forces, underlying problems, and alternative solutions. Three areas included decentralized budgeting in lists of "driving" forces but all five identified aspects of the practice which constituted "holding" forces. Problems associated with the practice included: (1) increasing demands on school staff in data-processing, bookkeeping, and reporting (mentioned in four reports); (2) too many restrictions in purchasing and accounting on the use of decentralized funds such as the use of self-pay purchasing procedures, transfer, and the definition of equipment and non-equipment (mentioned in two reports); (3) the perception that, as a consequence of (1) and (2), schools are required to adapt their time, operations, and procedures to accommodate accounting practice; (4) the reduction of the purchasing year creating pressures to spend unwisely; (5) the difference between school year and budget year; (6) the perception that principals have responsibility without authority; and (7) the lack of full-time secretarial help in elementary schools.

The consultants concluded (Calgary Board of Education, 1977b: 304) that "a result of all these factors is that principals are extremely frustrated by the whole budget process." These problems are all consistent with those mentioned during interviews conducted by this researcher.

The consultants' view. The consultants (Calgary Board of Education, 1977a:6) summarized the problems of budgeting in the following terms:

> The [Calgary Board of Education] appears to be run by the budget rather than by objectives and priorities. This causes unnecessary competition for limited financial resources leading to a great deal of conflict and the virtual elimination of interdepartmental and inter-divisional cooperation. In addition, there is a lack of understanding of the PAB process throughout the system and the concept of "controlled decentralization" has not been effective.

Disagreements

Respondents were asked to describe the frequency of their disagreements with persons at different levels of the system on matters related to school budgeting and to give their perceptions of the effect decentralized school budgeting had on the frequency and severity of such disagreements. No perceptions of effects were sought for area superintendents because these positions were established in the same school year as the system-wide adoption of decentralized school budgeting.

Central office administrators. The Superintendent of Instruction provided his perception of disagreements involving the Division of Instruction. He perceived no disagreements with the Chief Superintendent and considered that decentralization had no effect on frequency and severity. Disagreements with the Division of Support Services were described as "seldom" and were perceived to be more frequent and more severe since there was now more opportunity for disagreements. These disagreements typically concerned requests by Support Services to discuss violation of purchasing guidelines and deficits with principals. Disagreements with principals were described as "occasional" and were perceived to be more frequent and more severe because of the increased opportunity for disagreement. Examples cited included violations of guidelines, deficits, and the limits on carrying forward a surplus. No disagreements were perceived with area superintendents since these persons were included in the Division of Instruction where opportunity was frequently provided for the discussion of policy and procedure.

Area superintendents. Area superintendents and assistant area superintendents described disagreements with the Divisions of Instruction and Support Services and with principals as "seldom" or "never." Disagreements with principals typically concerned different judgments on the value of items included in budgets while those with the Division of Support Services included questions of interpretation and procedure. One area superintendent described his strong opposition to the degree of detail required in the PAB format used in the system. Disagreements with the Division of Instruction at central office concerned differing priorities with respect to allocations in school budgets.

Principals. Principals were asked to give perceptions of disagreements between principals generally and the Divisions of Instruction and Support Services, area superintendents, and teachers. The responses summarized in Table 78 indicate that a majority of respondents perceived disagreements to be "seldom" or "never" with the exception of disagreements with the Division of Support Services for which three of the six principals considered disagreements to occur "often" or "occasionally."

Four of the six principals considered that decentralized school budgeting had resulted in more frequent and more severe disagreements with the Division of Support Services while respondents were equally divided between "more" and "less" in assessing the effect of decentralization on the frequency and severity of disagreements with the Division of Instruction. Those perceiving an increase explained that decentralization provided an increased opportunity for disagreement. Those perceiving a decrease referred to the "openness" of differences which followed decentralization. One respondent indicated that disagreements were now less frequent and less severe because principals perceived the budgeting function has been transferred from the Division of Instruction to the Division of Support Services.

All principals responding to the item concerning disagreements with teachers considered that decentralization had the effect of more frequent disagreements or had no effect at all. Two principals considered disagreements were now less severe than before. Those perceiving an increase explained the increased opportunity for disagreement while the two perceiving less severe disagreements referred to the more amicable and open discussion of differences.

Three principals cited purchasing procedures in discussing disagreements with the Division of Support Services. Other examples

Table 78

Principals' Perceptions of Frequency and Severity of Disagreements in Calgary Public[a]

Persons in Disagreement	Frequency of Disagreements				Perceived Effect of Decentralization					
					Frequency			Severity		
	Often	Occasionally	Seldom	Never	Less	More	Same	Less	More	Same
Principals and Division of Instruction	0	1	3	2	3	3	0	3	3	0
Principals and Division of Support Services	2	1	2	1	1	4	1	1	4	1
Principals and Area Superintendents[b]	0	2	3	1						
Principals and Teachers[c]	0	1	5	0	0	3	2	2	2	1

[a] Six principals provided responses to these items.

[b] No responses for perceived effect of decentralization since area superintendents were appointed September 1, 1973.

[c] One principal declined to generalize on perceived effect of decentralization.

were procedures for carrying forward and items included in decentralized budgets. Two principals referred to differences in priorities between themselves and subject supervisors in discussing disagreements with the Division of Instruction while one principal noted disagreements related to areas to be decentralized. Disagreements with area superintendents concerned differing priorities and the amounts of certain allocations in addition to differences related to requests for transfer. Disagreements with teachers concerned the amounts of allocations to particular subjects or grade levels.

OBJECTIVES AND OUTCOMES

Objectives

Formal objectives. The Decentralized Budget Committee established in 1970 to plan the pilot formulated a set of ten objectives for the practice. These were contained in the report of the Committee (Calgary Public School Board, 1971:2) to the Board; namely:

1. To provide for greater school freedom and increased responsibility.
2. To provide greater flexibility to the schools for programs as they relate to community needs.
3. To encourage school and teacher innovativeness.
4. To encourage and facilitate the examination of program outcomes in relationship to the costs involved.
5. To encourage increased teacher satisfaction through involvement in the decision-making regarding the allocation of the resources to various school programs.
6. To obtain more efficient use of the dollars alloted to each school.

7. To reduce the reaction time required to meet changing school needs whether they be local or throughout the system as a whole.

8. To alleviate to a degree, the problems presented at the school level due to change in teacher staff in the middle of a budget year.

9. To promote the principle that school equipment and supplies belong to the school as a whole and not to a specific department.

10. To reduce fragmentation of the system and the identifying of certain schools for special consideration.

Eight of these ten objectives were reiterated in the Decentralized Budget Project Evaluation Report (Calgary Public School Board, 1972:4) where they were considered to be objectives of the pilot project rather than for the practice in general. The sixth and tenth objectives were deleted in this later formulation.

Perceptions of respondents. Central office administrators and principals were asked to give their perceptions by indicating the value placed on each of eight objectives included in the schedule. Table 79 contains a summary of responses together with perceptions of the progress which had been made toward the attainment of objectives.

All objectives were generally valued highly by area office administrators (perceived to have "much" or "great" value by at least three of the five). The Superintendent of Instruction perceived all to have high value except that related to the reduction of time to meet changing school needs. One area superintendent perceived that one objective of decentralized budgeting in Calgary Public was "to reduce the work-load at central office." He personally considered this objective to have little value.

Table 79

Objectives of Decentralized School Budgeting in Calgary Public: Perceived Value and Progress

Objective	Criterion	Central And Area Office Evaluation (N=6)[a]					Principals' Evaluation (N=7)				
		None	Little	Some	Much	Great	None	Little	Some	Much	Great
1. To provide the principal with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	0	1	4 (1)	0	0	0	1	6
	Progress	0	0	1	4 (1)	0	0	0	1	3	3
2. To provide teachers with an appropriate role in the decision-making process for the allocation of funds	Value	0	0	0	1 (1)	4	0	0	2	2	3
	Progress	0	1	1	3 (1)	0	0	1	1	3	2
3. To obtain a more equitable allocation of funds among schools	Value	0	0	1	2	2 (1)	0	0	0	4	3
	Progress	0	1	1	2	1 (1)	0	1	1	1	4
4. To obtain more efficient use of funds allocated to each school	Value	0	0	0	1 (1)	4	0	0	1	0	6
	Progress	0	0	0	4	1 (1)	0	0	1	1	5
5. To provide schools with greater flexibility in the development of the instructional program	Value	0	0	0	0	5 (1)	0	0	0	0	7
	Progress	0	0	0	1 (1)	4	0	1	0	1	5
6. To encourage school and teacher innovativeness	Value	0	0	1	0 (1)	4	0	0	0	1	6
	Progress	0	0	2	1 (1)	2	0	0	1	1	5
7. To reduce the time required to meet changing school needs	Value	0	0	1 (1)	1	3	0	0	0	2	5
	Progress	0	2	2	1 (1)	0	0	1	1	3	2
8. To encourage and facilitate examination of the relationship between program objectives, program outcomes and the cost involved	Value	0	0	0	1	4 (1)	0	0	1	0	6
	Progress	0	0	3	2 (1)	0	1	0	2	1	3
Other[b]											
To reduce the work-load at central office	Value	0	1	0	0	0					
	Progress	0	0	0	0	1					

[a] Responses of Superintendent of Instruction are shown in parentheses.

[b] One area superintendent perceived this to be an objective of decentralized school budgeting in Calgary Public.

All objectives were generally valued highly by principals (considered as having "much" or "great" value by at least four of the seven who provided responses to this item).

The distribution of responses suggests that there were no important differences between the perceptions of central and area office administrators on the one hand and principals on the other hand. Of special interest is: (1) the high degree of support revealed in the responses for the objectives established formally by the Decentralized Budget Committee, and (2) the unanimous rating of "great" given by both groups to the objective of achieving increased flexibility in the instructional program.

Outcomes

Area office administrators generally perceived a high degree of progress (considered to be "much" or "great" by at least three of the five) for all objectives except those related to reducing the time required to meet changing school needs and cost awareness. The Superintendent of Instruction perceived a high degree of progress for all objectives.

Principals generally perceived a high degree of progress (considered to be "much" or "great" by at least four of the seven respondents) for all objectives contained in the schedule. Three of the seven did not give a high rating to progress in achieving the highly valued objective related to cost awareness suggesting that some principals perceive a need for greater awareness.

The differences between the two groups lay in the perception by the majority of area administrators interviewed that progress was not high in attaining the objectives related to reduction of the time required to meet changing school needs and greater cost awareness. Several respondents explained their ratings for the objective of equitability. One noted that greater equitability between schools had recently been obtained by introducing the sliding scale factors to meet the needs of smaller schools while two suggested that the previously uniform per pupil grants constituted greater equitability than existed at the time of the interviews. These different perspectives suggested a lack of consensus on the basic method of allocating funds among schools.

SUGGESTIONS FOR CHANGE

The Superintendent of Instruction and five area office administrators were asked to indicate changes they would like to see in school budgeting practice. Eight principals were asked to indicate their perceptions of the changes principals generally would like to see. The responses are summarized in Table 80 .

Central and Area Office Administrators

The majority of respondents preferred no change in the degree of school budget authority and the extent to which a school could carry forward a surplus or deficit. Three of the five area administrators preferred increased operational flexibility for schools, achieved largely by removing some of the constraints perceived by principals at the time of the study. Two suggested a reduced involvement of area administrators. The two administrators preferring an increase in school budget authority

Table 80

Preferences for Change in Decentralized School Budgeting in Calgary Public

Area of Authority	Group	Desired Degree of Decentralization		
		More	Same	Less
School Budget Authority	Central and Area Office[a]	1 (1)	4	0
	Principals	1	7	0
Operational Flexibility	Central and Area Office	3	2 (1)	0
	Principals	5	3	0
Carry Surplus or Deficit	Central and Area Office	0	5 (1)	0
	Principals	3	5	0

[a] Responses of Superintendent of Instruction are shown in parentheses.

suggested the inclusion in decentralized budgeting of more aspects of staffing while a third suggested this as a future possibility.

Two area administrators suggested that schools should become more proficient in planning, and identifying goals and priorities. Other changes suggested once were: (i) the inclusion of bookkeeping in job descriptions for secretaries, (ii) removal of requirement that schools allocate surpluses in excess of $1,000 to specific programs, (iii) faster reporting to schools, (iv) reducing the delay between ordering and receiving, especially for books, (v) improved communications between the Accounting Department and schools, (vi) the integration of supplies and equipment accounts, (vii) consideration of removing per pupil allocations in decentralized budgets, and (viii) broader or more flexible use of the PAB classifications in reporting to schools and the Department of Education. The preferred future state of decentralization described by respondents incorporated these changes.

Principals

The majority of respondents perceived that principals preferred no change in the degree of school budget authority and the extent to which schools may carry forward a surplus or deficit. Five of the eight, however, felt that principals generally preferred increased operational flexibility through the removal of some or all of the constraints on transferability. Three principals felt that principals generally would prefer that a larger amount be permitted in carrying forward a surplus. Only one principal perceived a preference for the inclusion of staffing in decentralized budgeting.

Three principals perceived a preference for a longer purchasing year to alleviate the problems of "cut-off" dates. One respondent felt that junior high principals wished to have the services of a business manager.

The preferred future state of decentralization described by principals included the changes outlined above. Other changes suggested for the next five years and mentioned once were: (i) the inclusion of some aspects of staffing and maintenance in decentralized budgets, (ii) a return to uniform per pupil allocations at each level rather than using a sliding scale for different school enrolments, (iii) using average enrolments over one year to determine allocations rather than the weighted average of consecutive September 30 enrolments, (iv) fewer PAB categories, and (v) changing the budget year so that it coincides with the school year. Respondents indicated in several instances that not all principals preferred these changes. Two respondents personally felt that some changes were not warranted.

Management Study

The changes suggested by the various departments and groups in the management study tended to be general statements focusing on the removal of problems identified earlier in this chapter. The recommendations of the consultants (Calgary Board of Education, 1977a:30), based on these suggestions, were:

1. The budget should be set in accordance with system objectives and priorities.
2. The budget management procedures must be made more flexible particularly relative to budget transfers.
3. Training and development in financial management must be provided for non-financially oriented administrators.

4. The addition of an Assistant to the Area offices whose prime responsibility is to liaise with the "business" related functions in the rest of the system should improve financial control in the Areas.

The consultants stressed (Calgary Board of Education, 1977a:28) that problems in one area are related to those in other areas and that solutions to one problem may partially provide solutions to others. A number of other solutions suggested in the report have implications for decentralized school budgeting. These included the formulation of objectives at each level of the system, improving the planning and decision-making capability of the system, especially with the development of a Management Information and Planning System, and a clarification of roles and responsibilities. These were all consistent with the changes suggested during interviews with this researcher.

The report noted (Calgary Board of Education, 1977a:13) that the Board has approved the implementation of a Management Information System. The Acting Chief Superintendent advised this researcher that the budget format may not change substantially but "through better communication there will be better understanding of the process."

GENERAL EVALUATION

The general evaluation of decentralized budgeting in the system reflected the responses in the previous section. All respondents indicated varying degrees of satisfaction with current practice but qualified their evaluation by referring to the problems outlined earlier. Principals reported their perceptions of the evaluation principals generally would give to this item. The responses are summarized in Table 81.

Table 81

Satisfaction with Current Budget Practice
in Calgary Public

Degree of Satisfaction	Central and Area Office[a]	Principals
Highly satisfied	0	1
Moderately satisfied	4 (1)	6
Slightly satisfied	1	0

[a] Responses of Superintendent of Instruction are shown in parentheses.

The responses suggest that no important differences exist between the two groups with respect to the extent of satisfaction with current budget practice.

Some Important Qualifications

Respondents generally perceived a high degree of progress in attaining the objectives listed in the schedule and reported at least moderate satisfaction with the practice at the time of the study. Most, however, provided a number of statements which qualified these responses in the light of the problems summarized earlier in this chapter.

One central office respondent and two area administrators observed that many of the problems reported by principals, such as coding, "cut-off" dates, and delays, were more a product of Program Accounting and Budgeting than decentralized school budgeting. Another area administrator and one principal stressed that principals generally appreciated the benefits of decentralized budgeting but were very much concerned by the operational problems which have developed and which are perceived to originate in the Division of Support Services.

Respondents from the Division of Support Services were aware of the concerns of principals but felt there was a general lack of understanding at the school level of the origins and purposes of PAB and decentralized budgeting. One respondent noted, for example, the belief of some principals that, in order to implement PAB, it was necessary to have decentralized budgeting. This belief led, in turn, to the view that the many tasks of preparation and administration of decentralized budgets by school personnel were designed to provide information for the Division to enable the latter to prepare statements and reports for the Board and Department of Education. This respondent felt that these views may have originated in the 1973-74 seminars when much time was devoted to procedures for purchasing and accounting using the PAB classifications. Both respondents in Support Services suggested a need for more in-service activity, with professional educators playing a key role, to highlight the educational focus of both practices. One area administrator and one principal also noted a lack of understanding at the school level of the constraints under which the Division of Support Services must work.

One area administrator provided a broader context for his qualifying remarks. He challenged the view that current practice in the system constituted decentralized budgeting because the planning component at the school level was frequently absent. He felt the need in the system for a model for planning and the development of a management information system to support it. He suggested, further, that the problems of decentralized school budgeting which centred on the relationship between the Division of Support Services and principals should be seen in the context of the general problems of communication between central office and schools. This administrator reflected the spirit of the recommendations in the management study.

FURTHER DISCUSSION

The information contained in this chapter is examined further in Chapter 13, where it is consolidated with that reported for other systems included in the second stage of the study. This comparative review, presented against the theoretical background of Chapter 2 and the review of literature in Chapter 3, is organized under the following headings:

Forces Influencing the Adoption of Decentralized School Budgeting.

Objectives of Decentralized School Budgeting.

Change Strategies.

Problems of Implementation.

Preparation and Administration of School Budgets.

Operational Problems.

Disagreements in Decentralized Budgeting.

Attainment of Objectives.

Preferences for Change.

Satisfaction with Decentralized School Budgeting.

Chapter 12

EDMONTON PUBLIC SCHOOL DISTRICT

A PILOT PROJECT

The Edmonton Public School District was selected for inclusion in this study because of a seven-school pilot project in 1976-77 which enabled participants to make budget decisions for up to twenty-four of the twenty-seven items on the School Budget Authority Scale, including those related to certificated and non-certificated staff, subject to the constraints set out later in the chapter. This represented the highest degree of decentralized budgeting in any Alberta school system in 1976.

This chapter is delimited to an analysis of the process of organizational change for the pilot project. The method of analysis differs in three ways from that employed for the other systems considered in the study:

1. The change under consideration involves a relatively small number of schools within a large school system rather than the implementation of the practice on a system-wide basis.

2. The different phases of the change process chosen for the analysis of organizational change in this study are applied to the pilot project only. This differs from the analysis for the pilot project in Calgary Public in 1971-73, reported in Chapter 11, where the pilot was briefly reviewed as part of the planning phase in the larger context of system-wide implementation.

3. The analysis is restricted to matters related to parts 3 to 8 of the question for research because of a constraint placed on the researcher. Consent to conduct the study during the first six months of the pilot was given providing no evaluation of outcomes was undertaken. Consequently, there is no analysis of: (i) perceptions of the effect of decentralized school budgeting on the frequency and severity of disagreements on matters related to school budgeting, (ii) perceptions of the extent to which the objectives of decentralized school budgeting have been attained, (iii) preferred change to current practice, and (iv) the extent of satisfaction with current practice.

One limitation of the information collected in Edmonton Public arises from the period in which it was gathered. One complete budget cycle had not been completed and procedures for the balance of the 1976-77 school year were still being formulated at the time of the interviews in February. Furthermore, opportunities had not occurred for further problems associated, for example, with year-end purchasing, accounting, and reporting.

The System

The Edmonton Public School District operated 153 schools in 1976-77. Its September 30, 1976 student enrolment of 71,052 was the second highest in Alberta. The enrolment increased by 4.2 percent for 1965-74 compared to a provincial mean increase of 15.5 percent for the same period. These enrolment trends, summarized in Table 82, indicate a declining enrolment for the last five years of that period.

Table 82

Enrolment Trends in Edmonton Public[a]

Period	Change in Enrolment (percent)[b]	
	Edmonton Public	Alberta
1965-69	12.0	12.4
1970-74	(9.7)	(1.5)
1965-74	4.2	15.5

[a] Source: Alberta, Department of Education Annual Reports 1965, 1970, 1974-75.

[b] Figures in parentheses represent a decline in enrolment.

Administration

Figure 3 contains an extract from an unofficial organizational chart for central office in 1976-77 showing the senior management levels and the major functions of the different departments. The positions of central office personnel who were interviewed are indicated on the figure.

A unique feature of the administrative structure at central office is that the Superintendent who was appointed in 1973, is also the Secretary-Treasurer. This arrangement was instituted in 1974 when the former Secretary-Treasurer was appointed Deputy Superintendent. Regulations of the Department of Education provide that such an arrangement is no longer permitted for superintendents appointed after March 1, 1976.

The senior administrative group within the central office is the Superintendent's Executive Council consisting of the fourteen persons

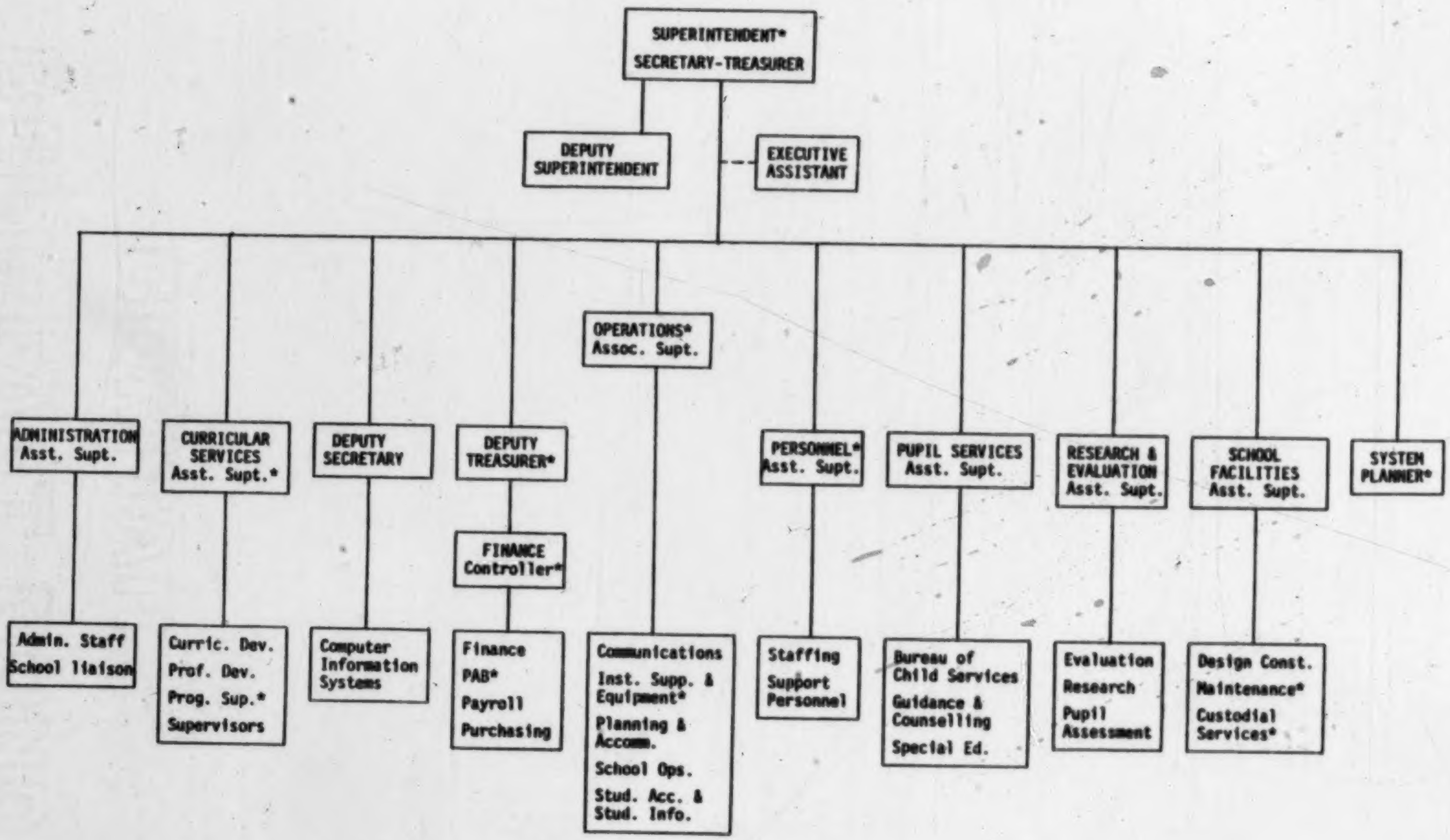
SUPERINTENDENT*
SECRETARY-TREASURER
DEPUTY SUPERINTENDENT
EXECUTIVE ASSISTANT
OPERATIONS* Assoc. Supt.
ADMINISTRATION Asst. Supt.
CURRICULAR SERVICES Asst. Supt.*
DEPUTY SECRETARY
DEPUTY TREASURER*
FINANCE Controller*
PERSONNEL* Asst. Supt.
PUPIL SERVICES Asst. Supt.
RESEARCH & EVALUATION Asst. Supt.
SCHOOL FACILITIES Asst. Supt.
SYSTEM PLANNER*
Admin. Staff
School liaison
Curric. Dev.
Prof. Dev.
Prog. Sup.*
Supervisors
Computer Information Systems
Finance
PAB*
Payroll
Purchasing
Communications
Inst. Supp. & Equipment*
Planning & Accomm.
School Ops.
Stud. Acc. & Stud. Info.
Staffing
Support Personnel
Bureau of Child Services
Guidance & Counselling
Special Ed.
Evaluation
Research
Pupil Assessment
Design Const.
Maintenance*
Custodial Services*

Figure 3

Extract From Functional Organizational Chart in Edmonton Public Central Office, 1976-1977

*Central office persons interviewed.

named in the organization chart shown in Figure 3: the Superintendent, Deputy Superintendent, Executive Assistant, Associate Superintendent, all Assistant Superintendents, Deputy Secretary, Deputy Treasurer, Controller, and System Planner.

Collection of Data

The Superintendent advised that the System Planner directed the implementation of the pilot project. The daily log maintained by the System Planner permitted the identification of those other persons in central office who had responsibilities or were involved in the project. After discussion with the System Planner, the large number of persons thus obtained was reduced to eleven key people to meet the constraints of the research methodology. Another person was interviewed at the suggestion of one of the respondents. Central office personnel interviewed were the Superintendent; System Planner; Associate Superintendent of Operations; Assistant Superintendents of Curricular Services and Personnel; Deputy Treasurer; Controller; Directors of Program Supervision, Instructional Supplies and Equipment, Program Accounting and Budgeting, Maintenance and Operations, and Custodial Services. The principals of the seven schools in the pilot were also interviewed in addition to a former principal of one school, who had left the system, but answered questions concerning the preparation of the budget. The System Planner was regarded as the key informant for the gathering of data.

Documents. Documents examined which related to the pilot were the daily log and correspondence file maintained by the System Planner, the budgets of the seven schools, and a variety of reports and memoranda concerning the project. Information related to the implementation in 1970 of a form of decentralized school budgeting was obtained from the files of the Director of Instructional Supplies and Equipment. Reports of the various committees from 1971 to 1975 which studied the need for change were also examined.

A major project, begun in 1971 and terminated prematurely in 1973, entitled Educational Planning by the Systems Approach (EPSA) included provision for a relatively high degree of school involvement in budgeting. Several documents related to this project were examined. Information concerning the termination was provided on a confidential basis by an informed central office administrator and a member of the EPSA staff, no longer employed in the system, who was identified as influential in the project.

Observation. The pilot project was monitored by the Executive of the Edmonton Public Local of The Alberta Teachers' Association. The researcher attended one meeting of the Executive during which six of the seven principals in the pilot responded to questions. The minutes of this meeting were also examined.

The researcher also observed a meeting attended by the Superintendent, System Planner, and the seven principals, called to commence planning the second year of the pilot.

Degree of Decentralized School Budgeting

The general practice in Edmonton Public. The questionnaire completed in the first stage of the study indicated that, on the School

Budget Authority Scale, all schools other than those engaged in the pilot made allocations for nine of the twenty-seven items. The mean for all Alberta school districts was also nine. Edmonton Public was placed at the sixty-fourth percentile among all systems in the province on this scale.

The degree of school budget authority described above was achieved by advising each principal of a lump-sum to be allocated to the various instructional programs for postage, supplies, textbooks, media materials, and certain categories of equipment. In 1977, these amounts were $22.79 per elementary pupil, $21.20 per junior high pupil, $20.14 per senior high pupil, and $11.93 per kindergarten pupil, in addition to a variety of grants on a per pupil basis for junior and senior high option programs and for Special Education. The budgets developed at the school level were submitted for central office review and incorporation into the system budget for consideration by the Board.

The administration of the budget was highly controlled, with the questionnaire response indicating that schools did not have "high discretion" to make any of the transfers listed in the Operational Flexibility Scale. "Moderate discretion" was indicated for transfers within and between the services purchased and supplies categories only. These responses indicated a relatively high degree of centralization with respect to operational flexibility since the mean number of transfers for which schools in school districts have "high discretion" is three for the twenty-seven items in the Scale. Edmonton Public ranks at the thirty-third percentile among all systems in the province on this scale.

The relatively low degree of operational flexibility described above was achieved by permitting schools to over- or under-spend the various accounts by a maximum of fifteen percent.

The questionnaire response indicated that schools in Edmonton Public generally may not carry an operating surplus or deficit to the following year. Procedures have been established to accommodate purchases ordered one year and not received until the following year.

The pilot project. Participants in the pilot project made budget decisions for up to twenty-four of the twenty-seven items listed on the School Budget Authority Scale, subject to the constraints set out later in the chapter. Those excluded were improvements to school grounds, structural alterations to school buildings and, with the exception of one school, the maintenance of buildings. This represented the highest degree of decentralized school budgeting in any Alberta system at the time of the study.

Details of the budgeting procedures are set out later in the chapter. In general terms, however, each of the seven schools received allocations for: (1) certificated and non-certificated staff, using the same criteria employed in other schools in the system, and (2) amounts in dollars representing the estimated costs of all programs to be decentralized in the services purchased, supplies, and capital outlay categories, determined on the basis of 1975 expenditure patterns in each of the seven schools. A budget was then prepared at each school wherein the various amounts set out above could be reallocated providing the terms of collective agreements, Board policy, and Department of Education curriculum guidelines were observed. Reallocations involving staff were made using the average system salary for the positions concerned as the unit for exchange. The budgets were then submitted to central office for review by subject supervisors and the Superintendent and presented to the Board in August and September, 1976. These budgets were for the 1976-77 school year rather than the normal calendar year used in school budgeting.

The administration of budgets was highly controlled, with schools having discretion to make transfers within predetermined limits ("moderate discretion") within and between programs for the services, supplies, and capital outlay categories of decentralized budgets. Provision was made for carrying a surplus or a deficit for all items except staff.

Decentralization Policy

A form of decentralized budgeting was implemented in all schools in two stages in 1970 and 1971. The procedures were set down in the various documents prepared annually for the preparation and administration of school and system budgets.

The much higher degree of decentralized school budgeting in the pilot was the result of an administrative decision by the Superintendent in late 1975 which was formally approved by the Board in September, 1976, when the budgets of the seven schools were adopted. The Board received a report prepared for the Superintendent by the System Planner (Parry, 1976) which included the objectives of the practice, the perceived need for change, and details of the implementation and proposed operation of the pilot. The Board approved the procedures for operational flexibility contained in the report. This report thus constitutes an explicit statement of administration and Board policy with respect to the 1976-77 pilot project.

The form of decentralized school budgeting implemented in the pilot was described in the report and by all respondents as "school-based budgeting." The term is also used in this chapter to describe the practice. The report (Parry, 1976:5) provided a concise explanation of the process and its limits:

> . . . school-based budgeting does not imply delegation of authority to determine the school budget or the system expenditure pattern. It is intended that this prerogative remain with the Board. The intent is to decentralize budget preparation to the principal and staff of the school, within a framework supplied by the Central Administration and the Board, which will include such parameters as contractual obligations with employees, curriculum guidelines and fixed financial allocations. The budgets will be subject to review by central office staff, the Superintendent must be willing to recommend their content to Board, and of course the budgets would be subject to Board approval.

No decision had been made by the Superintendent or the Board at the time of the study with respect to the duration of the pilot or the extension of school-based budgeting to all schools in the system.

CHANGE AND PROPOSALS FOR CHANGE 1970-1975

Decentralized school budgeting was implemented in Edmonton Public in two stages in 1970 and 1971. From 1971 to 1975, a number of committees examined the possibility of expanding the practice. Most recommendations for change were not implemented and the 1971 practice was continued with periodic adjustments with respect to the items included and operational flexibility until the decision in 1975 by the Superintendent to institute the pilot. This section of the chapter briefly reviews the changes and proposals for change from 1970 to 1975. This review constitutes an examination of "the state of the organization before change" in the framework adopted in this study for the analysis of organizational change.

1970-1971: Introduction of Decentralized School Budgeting

Decentralized school budgeting was introduced in 1970 when eleven accounts for textbooks, certain supplies and equipment, and library books were decentralized. Six additional accounts for supplies and bookbinding were decentralized in 1971.

Nature of decentralization. Schools were allocated a specific number of dollars for each account based on the number of classrooms or the number of students. Special allowances were made for small schools. Signing authority for purchases was transferred from subject supervisors to the principals. Schools were permitted to vary from these allocations to a maximum of ten percent in each account, except in special circumstances where these limits failed to meet the needs of a school, when the principal could present a case to an Appeals Committee.

Factors underlying the adoption. A report (Daneliuk, 1972) presented to the former superintendent outlined the development and operation of the practice and provided the results of an evaluative study. The report (Daneliuk, 1972:1) discussed the development of decentralized school budgeting in the context of trends initiated by the Department of Education and the Edmonton Public School Board:

> In recent years the Department of Education permitted jurisdictions increased flexibility in the development of educational programs. Subsequently each District has the opportunity to
>
> 1. More closely meet the needs of students in the community,
>
> 2. Take better advantage of the special competencies of staff.

> Similarly, the Edmonton Public School Board has been involved in the process of decentralizing various responsibilities to each school. One such responsibility has been the area of budgeting.

The report thus perceived the practice to be the result of both internal and external factors. The report also noted (Daneliuk, 1972:1) the benefits of the training and experience in decentralized budgeting for the proposed PPBES developed by the Department of Education.

Memoranda concerned with the practice indicated that a Budget Decentralization Committee of central office personnel, principals, and other individuals and groups made recommendations to the Superintendent on the nature of decentralized school budgeting.

Evaluation. The practice was evaluated in 1972 by the Research, Development, and Information Department in the system. Questionnaires were distributed to all principals, department heads, subject supervisors and a sample of teachers. Interviews were conducted with business managers in senior high schools and persons in the Controller's office and Information Systems Branch. The report of the survey (Daneliuk, 1972) indicated that seventy-five percent of all respondents preferred to retain the practice. A majority of respondents in schools perceived that decentralized budgeting resulted in: (1) school staff becoming more knowledgeable about costs, school budgets, and alternative materials; (2) the selection of more appropriate classroom materials; (3) the strengthening of program areas; (4) more efficient use of materials; (5) school staff doing a better job, and (6) school staff gaining experience in budgeting. Persons in the Controller's office reported that new patterns in purchasing had created problems while the introduction of decentralized budgeting had required the addition of one full-time clerk and had increased the load on the bookkeeping machine by twenty-five percent. An additional 2.5 hours of computer time was required to prepare monthly reports for schools.

The Blacker study. Blacker (1971) studied perceptions of decentralized school budgeting in elementary schools in Edmonton Public in 1971. The results of the study were summarized in Chapter 4. In general terms, he found that teachers and principals preferred "considerable" authority or "autonomy" for every budget item listed, including staffing, with the exceptions of caretaking services.

1971: A Proposal to Decentralize Equipment Accounts

On June 25, 1971, a committee was established under the chairmanship of the Director of Operations Research to study the decentralization of equipment accounts. Other members of the Committee were the Director of Curriculum Development, Supervisor of Administrative Staffing, Assistant Controller, Purchasing Agent and four principals.

The Committee proposed that school staffs establish equipment priorities, consolidation of which would become the subject supervisors' guide for budget planning. The report of the Committee (Walkey, 1971:2) noted that "the effect of this approach will be the decentralization of decision-making rather than decentralization of 'dollars'." The Committee considered that schools were too small an economic unit to handle the decentralization of maintenance accounts. Proposals were also presented for establishing equipment standards, completion of an inventory, and the upgrading of schools to the established standard.

The Committee considered the form of decentralized budgeting recommended above to be consistent with PPBES. It met with representatives of the Department of Education PPBES Task Force and noted (Walkey, 1971:1-2) that:

> . . . the concept of PPBES will involve the schools to a far greater degree in the allocation of expenditures. It is anticipated the manner of decentralization the Committee is recommending will facilitate the introduction and operation of PPBES.

The recommendations of the Committee were considered by senior management but were not implemented. One central office respondent indicated that the basis of the report was an inventory, an activity which was not completed until 1976. Another respondent recalled expressions of concern that the reduction of central office control may affect the quality of equipment and programs.

The EPSA Project

The Department of Education gave serious consideration in the early seventies to the implementation of PPBES. A decision was made to leave PPBES as a local option but all school systems were required to implement the financial information sub-system, PAB, by January 1, 1974. Details of PPBES and PAB are given in Chapter 5.

Edmonton Public was selected as one of ten systems to pilot PAB in 1971 and 1972 with system-wide implementation in 1973. Edmonton Public also submitted a proposal to the Department of Education in 1971 for joint funding to examine a form of PPBES designed to involve each school in planning. The formal objective of the project (Edmonton Public Schools, 1971:1), known as Educational Planning by the Systems

Approach (EPSA), was:

> . . . to develop the planning model conceptualized by the Edmonton Public School District. This will facilitate the making of swift, economical and appropriate decisions at the school level where the needs of the pupils and the local community can be most accurately assessed and the necessary resources most efficiently applied.

The plans for the project called for a relatively high degree of decentralized school budgeting.

The Department of Education agreed to meet fifty percent of the costs for the project under the Innovative Projects Fund. It was designed to start on July 1, 1971, and terminate on August 31, 1975. Five persons worked full-time on the project.

The EPSA project was to be implemented, first, in three schools, with a replication to follow in seven other schools. Provision was made for external evaluation. EPSA was terminated on December 31, 1973, two years before the proposed end of the project.

Two persons provided information on the reasons for termination. One was an administrator of the project while the other was familiar with the decisions which were made at the time. The factors which contributed to termination included:

1. Educators had difficulty relating to EPSA. The replication system of seven schools was not obtained because staff perceptions of complexity and heavy work load outweighed perceived benefits.

2. The necessary support and involvement of other decision-makers at the middle and upper management levels was not obtained.

3. The lack of a management information system to provide the necessary data base for decision-making.

4. Difficulty in operationalizing the EPSA model due to cost, a

late start, loss of staff, and inadequate in-service.

5. The realization that it would take longer than four years to complete the project. Future funding was uncertain due to the discontinuation of the Innovative Projects Fund.

1974-1975: A Renewed Interest in Decentralized Budgeting

A number of persons at central office expressed a continuing interest in decentralized school budgeting. The present Director of Instructional Supplies and Equipment, who was Director of Program Administration at the time, was invited in early 1974 to submit a proposal to senior management. He invited seven principals to complete a questionnaire seeking opinions on the existing form of decentralized budgeting. These principals indicated a desire to expand the practice and to increase the fifteen percent limit on operational flexibility. The Director submitted a proposal for a pilot project involving up to thirty schools in 1975-76, with the inclusion of equipment, furniture, media materials, and a raising of the flexibility factor to at least twenty-five percent in 1974, and fifty percent in 1975.

No immediate action was taken on the recommendations for increased decentralization. One respondent recalled scepticism based on the selected group of principals who provided information, and opposition from a senior person in the finance department to the proposal to raise the limits of operational flexibility. This respondent also recalled the Superintendent indicating that a pilot in an expanded form of decentralization would be considered in 1975.

In late 1974 and early 1975, the Superintendent asked various groups in central office to assess the existing state of decentralized budgeting and to submit proposals for change. Several respondents familiar with these developments recalled sharply differing views on the desirability and feasibility of expanding the practice.

1974: Proposal for a Principals' Budget Survey

In another attempt at instituting change, a committee consisting of the System Planner (chairman), Director of Program Administration, Assistant Superintendent of Research and Evaluation, and Controller, was appointed in the summer of 1974 to suggest procedures which would permit a higher degree of involvement by principals in the preparation of the system budget. A proposal with the following features was presented to the Superintendent's Executive Council:

1. Principals would be given information in early September 1974 on past program expenditure patterns in their schools for staff, supplies, capital outlay, and services purchased.

2. Principals would be invited to suggest changes to these patterns. These recommendations would be considered by central office personnel in late September during the preparation of the 1975 system budget.

This proposal for a Principals' Budget Survey was not implemented. One respondent indicated that strong opposition was expressed by a majority of persons at the senior management level. Another proposal for change was implemented immediately, however. Principals were advised that, for 1975, allocations for the different programs in the decentralized budgets would be consolidated in a lump-sum for the purposes of budget preparation.

1975: Recommendations of Principals' Committee

A committee of six principals was established in 1975 to recommend changes in decentralized school budgeting. The principals represented different levels of schooling in the system. The recommendations of the Committee included the following:

1. Principals should assume the responsibility for formulating an annual supplies and equipment budget using a per pupil grant.

2. The system budget should be based on information supplied by schools.

3. The principal should receive complete cost information for all areas of the school's operation except staffing.

4. A flexibility factor of twenty-five percent should be established for transfers between programs.

5. An equipment resale program should be instituted with the proceeds credited to the school concerned.

6. The principal should be involved to a greater degree in the decisions required for maintenance, repair, servicing and staffing. This proposal did not apply to budgeting in these areas.

These proposals were received by the Superintendent.

1975: Budget Process Committee of Central Office Personnel

The Superintendent established the Budget Process Committee in September 1975, to develop and recommend a plan for the preparation of the 1976 budget which included the following objectives:

1. A multi-year budgeting cycle.
2. Involvement of all principals in an advisory capacity by specifically eliciting their proposals for changes in expenditure patterns at their school.
3. The availability of comparative pupil costs for instructional programs by function for given units of instructional time.

The five-member committee consisted of the System Planner, who served as chairman, Deputy Treasurer, Director of Program Accounting and Budget, Statistician, and the Supervisor of Science and Health. The Committee met eight times and submitted a report to the Superintendent on September 25, 1975, which recommended that the preparation process for the 1976 budget should be the same as that used for 1975.

The report of the Committee noted dissension with respect to the involvement of principals, with solutions ranging from complete centralization of supplies and equipment to the extension of the practice to include equipment when inventory was completed. The majority of members also felt that major change in the budgeting process should follow organizational change, and clearer role definition, particularly with respect to supervisors and principals.

Summary

The introduction of decentralized school budgeting for instructional supplies in 1971 and 1972 continued, with only one major change, until late 1975 when the Superintendent called for volunteers for a pilot project in school-based budgeting. The major change occurred in 1975 when allocations for the different programs were consolidated in a lump sum for the purposes of budget preparation. Each principal was required to submit a formal budget document showing allocations across programs with the limit of operational flexibility increased from ten to fifteen percent.

A number of proposals to extend decentralization were made from 1971 to 1975 ranging from the high degree of school involvement contained in the EPSA project and the Superintendent's terms of reference for the Budget Process Committee to the call for an extension to items of equipment. The review of documents and information provided by respondents acquainted with these developments indicated a strong difference of opinion among central office personnel on the merits of further decentralization. The strong interest of the Superintendent and other senior administrators was contrasted with varying degrees of concern and opposition among subject supervisors and persons in the Finance and School Facilities Departments. The views of educators in schools also varied. The Blacker study in 1971 found evidence of a preference among principals and teachers at the elementary level for more budget authority, which included allocations for certificated staff, whereas the principals on the 1975 Committee recommended an extension to equipment only in budgeting, but a wider involvement in other kinds of decisions.

RECOGNITION OF A NEED FOR CHANGE

The Superintendent indicated that he personally made the decision to call for volunteers to participate in a pilot project in school-based budgeting, with the Board formally approving the budgets prepared by the seven schools. He outlined the factors underlying his decision to adopt the practice. All other respondents were asked to give their perceptions of these factors. The Director of Program Supervision provided information for the Assistant Superintendent of Curricular Services who commenced service with Edmonton Public after the decision had been made.

Internal Factors Underlying the Adoption of School-Based Budgeting

Table 83 summarizes the classification of forces perceived as operating inside the school system. The most frequently identified factor was the management strategies of the Superintendent based on his philosophy and perception of problems with existing practice. The Superintendent explained his decision by noting that a relatively centralized budgeting system, which had proved satisfactory in former times, was now attempting to meet the needs of over 150 different schools in a much larger system with little organized input from persons at the school level. He felt that these different needs could not be met in a meaningful way until the budget process was changed. He also noted that, in areas such as renovations, where the amount of money was limited, persons at the school level were in the best position to provide information on priorities. He considered that the school-based budget,

Table 83

Internal Factors Underlying School-Based Budgeting in Edmonton Public

Individual or Group Articulating Interest	Description	Frequency	
		Central Office (N=11)	Principals (N=7)
Superintendent	Management strategies based on his philosophy and perception of problems with existing practice	5	7
Other central office personnel	The interest of persons such as System Planner, Director of Instructional Supplies and Equipment and several other administrators	3	1
School Board	Interest in innovation	0	1
Principals	Desire on the part of some principals and teachers to be more involved in decision-making; some dissatisfaction with existing practice, especially with respect to equipment	5	0
Tradition	A continuation of existing trends in system	0	1

as defined earlier in this chapter, was an appropriate vehicle for obtaining this kind of input.

The Superintendent recalled that this high degree of school involvement had not been obtained in the unsuccessful EPSA project, and that other proposals for change had suggested the extension of decentralization to a limited number of areas. He felt that there was "a real inertia" to any kind of change and believed that, rather than extend the practice in a series of stages in all schools in the system, it was best to select seven schools of varying kinds to investigate the implementation and outcomes of a relatively high degree of school involvement.

Other respondents gave their perceptions of the reasons underlying the Superintendent's decision. Some referred to his belief that principals and teachers should be more involved in decision-making and his desire to "deliver the system to the schools." He was seen as responding to a desire of some principals to be more involved. Others saw him as responding to the complexity of the system, reducing the role of the Finance Department and freeing subject supervisors of tasks in budgeting. One respondent noted the Superintendent's impatience with the lack of previous action.

The factor mentioned with equal frequency by central office respondents was the desire on the part of some principals and teachers to be more involved in decision-making, especially in budgeting. No principal identified this as a factor though they acknowledged that the Superintendent perceived it to exist.

Only one of the five respondents in Finance and School Facilities identified factors they perceived to underly the decision. Three saw the decision as being the initiative of the Superintendent but were not aware of the underlying factors, while one did not identify an internal factor. One perceived it to be a decision of persons other than those in the Finance Department who were dissatisfied with the existing budgeting system for the reasons described below. The respondents in School Facilities believed that decentralization was an appropriate reason if an organization has lost control, a situation which they did not believe applied to their aspect of operations.

Perceived weaknesses in the budgeting process. The report to the Board (Parry, 1976) outlined the need for change exclusively in terms of weaknesses perceived in the existing budgeting process. It considered the four functions of budgeting to be forecasting, planning, authorizing, and controlling, and asserted that inconsistencies existed between budgeting and other practices with respect to those functions.

The report noted that budgets were prepared by program while enrolment forecasting was prepared by system, function and school. There was little evidence of coordination between programs as far as planning and budgeting were concerned. The report noted that an adequate financial information base had not been developed and acknowledged the problems created by the difference between the calendar year and school year.

The report also asserted weaknesses as far as authorizing and controlling functions were concerned, and, spanning both of these, an accountability function. It noted that subject supervisors were held responsible and accountable for programs, but principals were responsible for the deployment of staff, representing ninety percent of school budgets.

Staff were budgeted by program but allocated to schools on the basis of a predetermined teacher-pupil ratio. Further, the fall deployment came in the last four months of a budget year, when it was not possible to amend the budget, and committed the system for two-thirds of the following budget year. The report also referred to a lack of sanctions or rewards to support the control function.

The report recommended school-based budgeting as a means of overcoming these weaknesses and of achieving the purposes of other changes since 1968 without the need for change in organizational structure.

External Factors Underlying the Adoption of School-Based Budgeting

Table 84 summarizes the external factors perceived by respondents. The most frequently mentioned was a general trend toward decentralization and awareness of what was happening in other systems. Six did not perceive any external factor to be acting while three suggested factors as "possibly" underlying the adoption.

The Superintendent felt that the interests of the community may have been a factor but only indirectly through the views expressed by principals and teachers. He indicated that "the pressures for change were simply not articulated among the various publics in our community."

Decision

Decision by the Superintendent. The decision to proceed with the pilot was made by the Superintendent with the Board formally approving the budgets of the schools after the planning and budgeting preparation

Table 84

External Factors Underlying School-Based Budgeting in Edmonton Public

Factor	Description	Frequency Central Office (N=11)	 Principals (N=7)
Technological	A general trend to decentralization, awareness of experience in other systems	4	2
Political	1. Interest on the part of the community	1	0
	2. The "accountability" movement	0	1
Economic	Pressure resulting from increasing costs producing competition for funds best resolved at school level	1	0
Demographic	Pressure resulting from declining enrolments producing competition for funds best resolved at school level	1	1
Legal	The introduction of PAB	1	1

process had been completed. Members of senior management who were interviewed also perceived the decision to be that of the Superintendent although the views of that group had been sought earlier as indicated above. Two respondents indicated that reservations had been expressed by some persons on the basis of: (1) problems associated with existing budget practice, (2) the possible "trade-offs" involving certificated and non-certificated staff, and (3) difficulties resulting from schools not accurately projecting their needs. Respondents in Finance and School Facilities indicated that they were involved only after the decision to proceed with the pilot had been made.

Decision by the schools. An invitation was extended to all schools in the system to volunteer for the pilot project. Thirty-four applications were received. Principals of the seven schools selected for the pilot were asked to indicate the reasons for their application and the manner in which the decision to volunteer had been made.

Four of the principals perceived the pilot to be a means of overcoming deficiencies in the existing budgeting process. One referred to the problems of delay and "red-tape," while three indicated that allocations in staff and equipment did not meet the needs of their schools. The principal of a vocational school advised that his school had been relatively decentralized compared to others in the system and the pilot was perceived as a way of extending program flexibility. Three principals indicated that their own personal interest in decentralization was a factor.

Six principals stated that the application to participate was discussed at a staff meeting with a formal vote, consensus, or lack of opposition the basis for action. One principal indicated that he discussed the issue informally with a few teachers. Two principals described reservations held by staff members with respect to the time involved, the extent of operational flexibility which would result, and the lack of information on the project.

OBJECTIVES

Formal Objectives

The report prepared by the System Planner (Parry, 1976:1-2) and submitted to the Board in September, 1976, contained the following purposes for school-based budgeting and the pilot project:

1. School Based Budgeting

   (a) To provide principals and teachers with an appropriate and effective role in the decision-making process in education.

   (b) To develop a valid system of accountability.

   (c) To ensure the effectiveness of the expenditure of the educational dollar.

   (d) To give the budget process, and the budget document a direct educational focus and make it a useful management tool.

2. Pilot Project

   To prepare expenditure budgets for seven designated schools, in order to identify problems associated with the process of developing school-based budgets, and to resolve them where possible.

Perceptions of Respondents

Five central office administrators and the seven principals were asked in an open question to give their perceptions of the objectives of school-based budgeting. The responses were classified according to the objectives listed in the structured items of the interview schedule used in other systems in the study. The responses are summarized in Table 85.

The Superintendent endorsed the objectives in the report to the Board but suggested that an over-riding objective was to meet the needs of the more than 150 schools in the system. He referred to the practice

Table 85

Perceived Objectives of School-Based Budgeting in Edmonton Public

Objective		Frequency	
General Descriptor	Corresponding Item in Interview Schedule	Central Office Administrators (N=5)	Principals (N=7)
Subsidiarity	To provide principals and teachers with an appropriate role in the decision-making process for the allocation of funds	3	4
Efficiency	To obtain more efficient use of funds allocated to each school	1	2
Flexibility	To provide schools with greater flexibility in the development of the instructional program	2	1
Accountability	To encourage and facilitate examination of the relationship between program objectives, program outcomes, and the costs involved	0	1

of encouraging differences among schools in addition to those differences which inevitably exist.

The most frequently mentioned objectives are classified as those implying the principle of subsidiarity; that is, that decisions should be made at the level at which those decisions are to be effected. An underlying assumption is that better decisions will result. Several respondents suggested benefits which result from achieving this objective, such as improved school climate, a reduction in delay in meeting school requests, the capacity for long-range planning, and a feeling of responsibility.

Other objectives are classified as related to efficiency, flexibility, and accountability. The responses listed in Table 85 suggest that there are no important differences between the perceptions of central office administrators and principals with respect to the objectives of school-based budgeting.

PLANNING THE PILOT PROJECT

The planning and implementation phases of the pilot project did not occur in discrete periods of time. The two phases are considered separately for purposes of analysis, although many planning activities took place after schools commenced budget preparation. The major stages of the planning process are briefly reviewed below.

Selection of Schools

Schools were invited in early 1976 to volunteer for participation in the pilot. The selection was made by the Executive Assistant to the Superintendent and approved by the Superintendent. The criteria used were the type of school, size, geographic location, and a commitment to participate in the project for two years. Three elementary, an elementary-junior high, a junior high, a senior high, and a senior high vocational school were selected. These schools and their characteristics are listed in Table 86.

Table 86

Schools Selected in Edmonton Public Pilot Project

Name of School	Type	Enrolment	Number of Teachers	Location
Grovenor	Elementary	173	8.4	West
Lynnwood	Elementary	442	22.0	West
Kensington	Elementary	360	17.7	North
Parkdale	Elementary-Jr. High	460	22.0	North-central
Hardisty	Junior High	765	38.0	East
M.E. LaZerte	Senior High	1850	93.5	Northeast
W.P. Wagner	Sr. High Vocational	1100	82.0	Southeast

Role of the System Planner

The Superintendent appointed the System Planner to direct the pilot project. This person had been employed in the system for six years, three as Director of Planning and three as System Planner. He held a Master's Degree in Civic Design and was employed previously as Chief Planner in the Department of Municipal Affairs in Manitoba and as Director of Planning with a consulting company. He was also employed for one year by the Department of Regional Economic Expansion in Ottawa.

The System Planner had not been directly involved with previous changes in decentralized school budgeting or with the EPSA project. He had, however, at the request of the Superintendent, examined the budgeting process used in the system. He was the Chairman of the Principals' Budget Survey Committee in 1974 and the Budget Process Committee in 1975.

Defining the Problem

Meetings were held with principals in the pilot in early March 1976. After an initial briefing, agreement was reached on the kind of information which would be required, responsibility for obtaining information, and dates upon which tasks would be completed.

The System Planner prepared a preliminary plan of the preparation process which involved the specification of tasks, personnel, and dates leading up to the presentation of budgets to the Board on June 1, 1976. Central office personnel were responsible for enrolment forecasts, identifying constraints, determination of 1975 expenditure patterns and allocations for 1976-77, and reviewing educational plans and budgets prepared by schools. School personnel were responsible for enrolment forecasts by program, verification of expenditure patterns, and preparation of educational plans and budgets.

The principals met with the System Planner and different groups of central office personnel on twelve occasions from March 9 to December 6, 1976. Much of the time was spent in formulating plans for 1976-77 as set out below.

Defining the Limits of Decentralization

Agreement was reached that an item would not be decentralized unless the principal could be given the freedom to reallocate the amount concerned to other purposes. The operations of the Finance Department, Pupil Assessment, System Evaluation and Program Supervision remained centralized.

There was disagreement among central office personnel and principals with respect to decentralization of Maintenance of Buildings and Grounds. The concerns of the various groups and individuals are outlined elsewhere in the chapter. Only one school elected to receive a partial allocation for this item.

The System Planner indicated that this aspect of the planning process was time-consuming and extended beyond the date set in the preliminary plans.

Determining Past Expenditure Patterns

A review of past expenditure patterns in each of the seven schools was commenced in February. Persons in the Finance Department provided the various ledgers required but were not directly involved in preparing the information because they were engaged at that time in the preparation of the 1976 budget for the system as a whole.

The System Planner worked mainly with the Director of Instructional Supplies and Equipment to prepare this information. While 1975 figures were satisfactory for instructional supplies, difficulties were encountered with equipment and furniture because amounts and items fluctuated extensively from year to year. Data from 1973 to 1975 were prorated to determine an appropriate allocation for 1976-77.

This information was extracted from ledgers without the aid of the computer. This proved a time-consuming process with the System Planner noting (Parry, 1976:3) a need for change as a consequence:

> It was apparent at this point that there needs to be a major effort in the area of computer programming to enable the Information Systems Branch to convert the general ledger into management information that is more useful to both central office and the schools.

A further delay was experienced when principals located errors in the information obtained by this process.

Allocations for 1976-77

The previous expenditure patterns formed the basis of initial allocations to the various programs for services purchased, supplies and capital outlay to be decentralized in 1976-77. Amounts were determined using this information and projected enrolments, with adjustments for inflation.

Principals were advised of allocations for certificated and non-certificated staff. These were determined by the Personnel Department using the same criteria that would have been employed if the schools were not in the project. The average salary of teachers in the system at each level and the average salary in the system for each non-certificated position were determined and became the basis for any reallocations by schools during the preparation of budgets.

The schools in the project were notified of these allocations, which served as the basis for preparation of budgets. Schools were permitted to reallocate within the limit of the total of all allocations subject to constraints determined by central office personnel, namely: (1) provincial curriculum guidelines were to be observed, (2) contracts with Board employees could not be violated, and (3) the project could not be used to circumvent problems for which procedures were already developed.

Plans for Budget Administration

The Board approved plans developed by the System Planner for operational flexibility in the administration of the budgets for the seven schools. These plans were amended in January 1977, after problems were encountered. Details are set out in the next section of the chapter.

A review of documents and interviews suggested that much of the planning with respect to purchasing, operational flexibility, and the carrying of a surplus or deficit to 1977-78 was undertaken in the fall of 1976 after budgets were approved by the Board. Principals met with the System Planner and other central office personnel on three occasions to discuss requisitioning, cost control procedures, and expenditure reports. The procedures on flexibility and carrying were finalized in a memorandum from the System Planner in January 1977. Details of these plans are contained in the next section of the chapter.

IMPLEMENTING THE PILOT

Preparation of Budgets

This section focuses on procedures adopted to prepare budgets for 1976-77. The preparation process is analyzed from the perspectives of time, task, and personnel involved at each of the school, central office and Board levels.

The school. The following were the major tasks of each school in the preparation of budgets:

1. Verification of 1975 expenditure patterns in March.
2. Preparation of a statement of proposed program changes for

1976-77 and an outline of alternate strategies for their achievement. This statement was submitted to the Superintendent in late April.

3. Preparation of budgets after 1976-77 allocations were advised and program changes were approved. These were submitted to central office in early June for review by the Superintendent, other members of the senior management group, and subject supervisors.

4. Budget revisions were completed in June and July. The final form was presented to the Board at one of two sessions in August and September. Principals were required to appear before the Board to defend their budgets.

A systematic effort to involve teachers in the budgeting process was made in five of the seven schools. In each instance, this was accomplished by the distribution of forms to teachers requesting information varying from a statement of objectives to a specification of items of equipment and furniture to meet program needs. All principals indicated that time constraints prevented a more extensive involvement of staff. Those not involving all staff in 1976 planned to do so in 1977.

Three schools used committees during budget preparation. One school established a committee of volunteers to examine needs expressed by teachers, with the principal determining the specific allocations and preparing the budget document. The administrators determined the budget in each of the two senior high schools. The final draft of the budget was adopted by staff vote in two elementary schools only. The principal worked by himself to prepare the budget in three instances.

All principals reported a higher degree of staff involvement in budgeting than in previous years when allocations were made for instructional supplies only. A more extensive involvement was planned in each instance for the 1977-78 year. Changes in the different schools included a more comprehensive questionnaire to be completed by teachers, the formation of a "cabinet" of administrators with a major role in budgeting, more thorough analysis of program needs, and the formation of a Finance Committee in two schools. One of the two schools without extensive teacher involvement in 1976-77 planned to use a questionnaire for teachers and to solicit information from parents.

The widest variety of activities planned in the preparation for 1977-78 was found in M.E. LaZerte Composite High School, where constraints of time prevented extensive staff involvement in 1976-77. A Program Needs Committee with representatives from each teaching department met weekly from January to April to make recommendations regarding class size and teaching assignment of school program needs. A Budget Review Committee of five parents met monthly to study the budget and make recommendations for 1977-78. Eighty-five parents and thirty-five students responded to a public request to meet on March 7 to assess and rank the fifteen goals of basic education defined by the Alberta Department of Education. The Principal indicated that staff in each department were formulating objectives to meet the goals given high priority in this evaluation. It was found, for example, that skills in communication were given top ranking in value but not in achievement. The objectives in each subject were revised to reflect a greater emphasis on these skills.

Central office. The roles of central office personnel in the planning stage were outlined earlier in the chapter. The following were the major tasks associated with the budgets prepared by schools:

1. The System Planner continued to coordinate the process and provide assistance to schools as the need arose.

2. The Superintendent received submissions from schools in late April outlining proposed program changes in 1976-77.

3. The Superintendent and senior management received budgets from schools in June. These were reviewed by subject supervisors whose comments were summarized and forwarded to the System Planner. These comments were discussed with principals but no major changes to budgets were made as a consequence.

4. The budgets were presented to a Conference Committee of the Board in August (four schools) and September (three schools). The Superintendent and System Planner provided supporting statements at these meetings. A formal written report was prepared by the System Planner (Parry, 1976).

Board. The Board formally adopted the budgets in the manner outlined above. Trustees asked a variety of questions but no changes were made. Questions generally concerned the nature of changes which were made possible by the process and sought the opinions of principals with respect to school-based budgeting.

Program Changes Achieved Through School-Based Budgeting

Each of the seven schools submitted a comprehensive budget document to the Board which included statements of objectives, an outline of planned change, and details of proposed expenditures for each program. The largest budget document contained ninety-three pages.

Table 87 summarizes the extent to which each of the seven schools used discretion to reallocate funds from the amounts determined on a formula basis. The totals reveal a movement of funds from supplies and equipment to services purchased and staffing categories. An increase in allocations for support and custodial staff and a decrease in allocations for certificated staff are revealed in the totals for the staffing categories.

The reallocations at Grovenor illustrate the flexibility achieved by the process. Small group instruction for pupils with learning difficulties in mathematics was achieved by an increase of a 0.2 FTE teacher. The addition of a 0.3 FTE teacher aide provided clerical and other assistance to teachers and pupils. Increased time for teacher program planning and coordination in program planning by the principal was also instituted along with provision for counselling and guidance time. The school was able to purchase a duplicator and set aside funds for new mathematics texts before these items could otherwise have been acquired. These changes were achieved by a major reduction in the supplies component of the budget and a reduction in teacher-librarian time. Only one school made no changes to the allocations determined by formula. The Principal of W.P. Wagner indicated that a decision was made to use the first year of the pilot to become familiar with the process but pointed out that his school had been relatively decentralized in previous years because of its vocational programs.

Table 87

Difference Between Formula Allocations and School Budgets Expressed as a Percentage of Allocation[a] in Edmonton Public Pilot Project[b]

School	Staff				Supplies	Equipment	Services	Total
	Certificated	Support	Custodial	Total				
Grovenor	1.05	19.41	2.00	1.85	(41.69)	6.66	(4.85)	0.00
Hardisty	0.11	1.89	(1.11)	0.10	(8.17)	0.00	3.80	(0.10)
Kensington	(0.44)	6.58	0.89	(0.04)	8.50	(41.97)	0.67	(0.02)
M.E. LaZerte	(0.66)	15.01	3.56	1.10	(23.38)	(15.25)	12.42	0.00
Lynnwood	(0.80)	19.36	(1.35)	0.03	(28.92)	49.32	9.36	(3.21)
Parkdale	(0.89)	11.04	0.00	(0.44)	1.55	14.72	7.66	0.00
W.P. Wagner	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	(0.33)	8.50	1.13	0.41	(12.34)	(6.05)	5.80	0.03

[a] ( ) indicates a decrease.

[b] From Parry (1976).

7

Administration of the Budget

This section provides information on the procedures employed in the administration of the 1976-77 budgets with respect to transfer, carrying forward, purchasing, control, and reporting.

Transfer. Figure 4 summarizes the limits of operational flexibility at the school level approved by the Board. Schools may transfer funds between programs to a limit of twenty-five percent and between non-staff objects to a limit of fifteen percent. No transfers may be made involving staff. The System Planner noted in his report to the Board (Parry, 1976:12) that higher limits may take away the incentive to plan and budget. The Board gave authority to the Superintendent to approve transfers between programs in the range from twenty-five to thirty-five percent and for transfers between non-staff objects which exceed fifteen percent. Transfers between programs which exceed thirty-five percent or involve staff require Board approval.

An amendment was made to these procedures in a memorandum prepared by the System Planner in January, 1977, when it was realized that any transfer involving a program or first level object for which no amount was originally budgeted would require at least the approval of the Superintendent. The change permitted a transfer of up to one percent of the total supplies, equipment and services budget, or $200, whichever is the greater, up to a maximum of $1000. The lower limit of $200 assisted the small school while the upper limit of $1000 was established to ensure that flexibility for the larger school did not destroy the intent of the budgeting process.

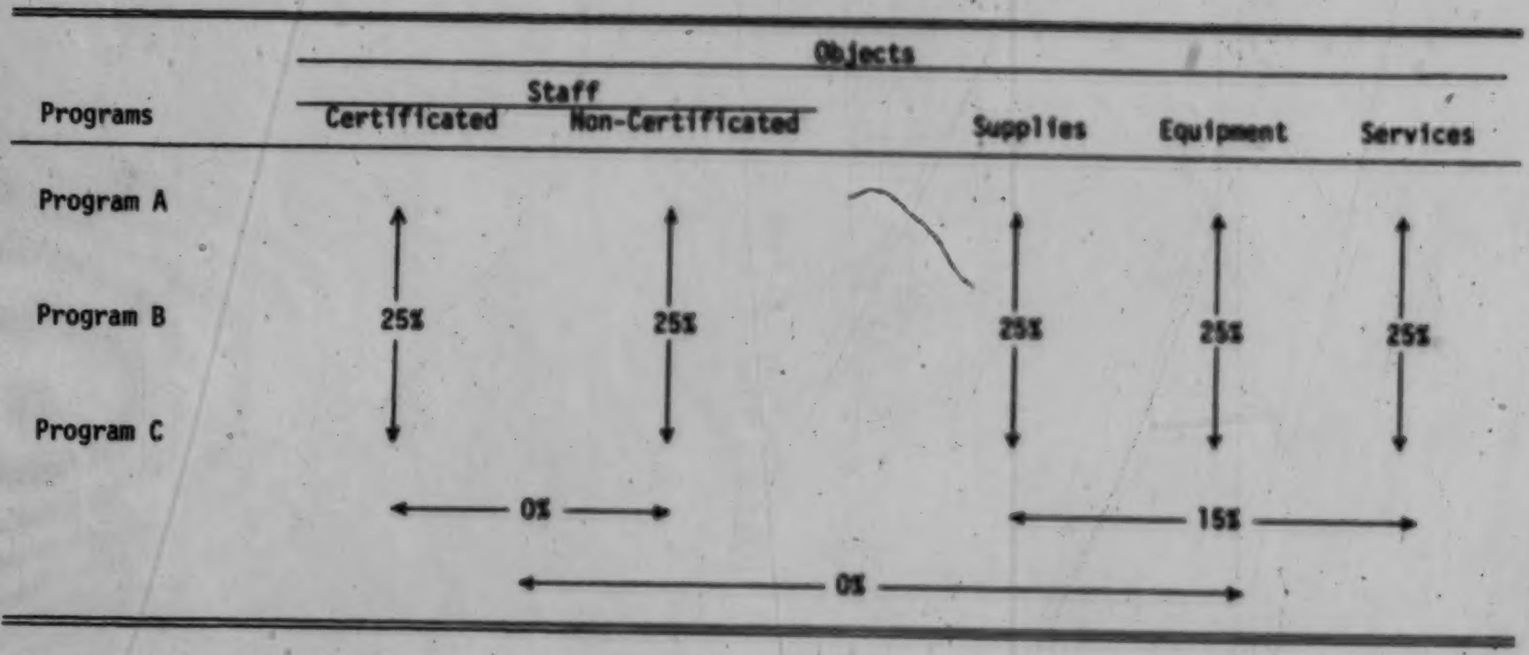
Objects
Staff
Programs
Certificated
Non-Certificated
Supplies
Equipment
Services
Program A
Program B
Program C
25%
25%
25%
25%
25%
0%
15%
0%

Figure 4

Operational Flexibility at School Level in Edmonton Public Pilot Project

Transfer requests must be approved by subject supervisors to ensure conformity with curriculum guidelines.

Carrying forward. The January 1977 memorandum from the System Planner confirmed that schools were permitted to carry the full amount of any surplus or deficit for non-staff objects but that there would be no carrying forward for staff objects.

Purchasing. Purchasing procedures were not affected by the adoption of school-based budgeting except for the transfer of signing authority from central office personnel to the principal.

Control. The procedures for transfer and purchase set out above define the method of control of expenditure. These procedures are facilitated by reports issued by central office, discussed below, and records maintained at the school level.

Six of the seven principals reported that books were kept at their schools. These were based on estimated expenditures and hence provided only an approximate figure for the balance in any account.

Financial reports. Schools had received only two financial reports for 1976-77 when interviews were conducted in February. Four of the principals indicated that these had relatively little value because of apparent inaccuracies.

The reports were produced without the aid of a computer using a format prepared by the System Planner. A different format was discussed with principals in March, 1977.

The Controller indicated that the proposed formats were not consistent with accounting practice used in the system and the "manual" tabulation of information required the services of one member of his department for one week on each occasion a report was prepared. He reported that the delays in producing reports were associated with the heavy burden of work faced by his staff in preparing year-end reports for the system as a whole. These difficulties were acknowledged by the System Planner and several principals who reported inadequacies in the reporting process.

PROBLEMS AND CONCERNS

Respondents were asked to recall problems encountered in the planning and implementation of the pilot project. These are summarized and discussed below along with a number of concerns expressed by different individuals and groups. A frequency count of problems mentioned is employed only for principals, since each of the other persons interviewed was representative of a particular department or was, in other respects, a key respondent.

Board

The Superintendent indicated that the Board had not encountered problems with school-based budgeting. He perceived trustees to be supportive of this kind of decentralization.

The Superintendent reported that some trustees had indicated a concern with respect to processes to be employed if the Board was required to consider 150 budgets. The Superintendent stated that he envisaged taking all budgets to the Board with a personal recommendation for approval, with modifications based on the analysis of subject supervisors and others during a central office review.

Superintendent

The Superintendent described three problems he had personally encountered:

1. The difficulty of gaining acceptance for the project "at face value," that is, a framework within which there can be meaningful decision-making. He described his major concern as ensuring that the project was developed and articulated to the point where the professional educators gained an appreciation of what was being attempted.

2. The information base was inadequate to meet the needs of the project. He considered this must be rectified before system-wide implementation was possible.

3. The Superintendent was personally concerned at the amount of clerical work associated with the project at the school level.

One central office respondent perceived the Superintendent to be faced with the problem of establishing control should the project be implemented system-wide while another referred to his concern at the apparent incompatibility of the school and calendar years. Three principals perceived the Superintendent encountering difficulties in mobilizing support for school-based budgeting.

System Planner

The System Planner identified three major problems he had personally encountered in the project:

1. The difficulty in accomplishing change at the central office level as well as a change at the school level.

2. The difficulty in providing schools with the information necessary for the preparation of budgets.

3. The lack of planning time which followed the decision to implement a pilot project.

One central office respondent noted the problems faced by the System Planner in attempting to modify the decision-making process at central office while another perceived him to be at a disadvantage in not being a certificated teacher. A third central office respondent considered the System Planner to experience difficulties in working with the Finance Department. Five of the seven principals considered that his major problems were associated with opposition at central office.

Finance Department

Five problems were reported by the respondents from the Finance Department:

1. Difficulties created in accounting by the difference between the school year (pilot budget) and the calendar year (system budget).

2. Problems associated with preparing financial reports for seven schools. Delays resulted from the preoccupation of personnel with system budgeting and reporting. The format required for the pilot was inconsistent with computer programs used at the time.

3. Disagreement among senior management, especially over the report submitted by the System Planner which respondents perceived as critical of the Finance Department.

4. Expectations of educators which exceeded the capability of the accounting system.

5. Violations of purchasing procedures by a small number of principals.

Respondents in the Finance Department expressed a number of additional concerns, especially with respect to the implications of school-based budgeting in all schools. These concerned a perceived lack of control on overspending by principals, the unresolved question of the extent to which carrying should be permitted, and the need for time to improve the accounting system. One respondent considered that the practice of allowing transfers was inconsistent with the notion of the budget, which should be regarded as a "fixed entity." It was considered preferable to allow surplus and deficit expenditure in the various accounts. Another respondent believed that system-wide implementation could be achieved in Edmonton Public with eighteen months of preparation time.

Other central office respondents also identified problems encountered by the Finance Department. One indicated difficulties with the design of the necessary work, but was uncertain if more planning time would solve the problem. Another referred to the lack of technology to produce reports and the difficulties of adjustment to school-based budgeting after completing the large task of introducing PAB in the system. A third respondent identified problems with reporting and concern with respect to control. Four principals acknowledged the problems associated with producing financial reports while two referred to a concern among persons in the Finance Department that principals lacked skill and experience in budgeting. One perceived that these persons felt threatened by the process of decentralization.

Curricular Services

The Assistant Superintendent of Curricular Services acknowledged that several subject supervisors were concerned at what they perceived to be inadequate allocations in the school-based budgets. He explained, however, that these responses were set in the context of problems of role definition with respect to responsibility for a particular program at the school level. He considered that the major concern was not a product of school-based budgeting but an extensive redefinition of the role of the subject supervisor. Rather than exercise control over a portion of the budget, the supervisor is now encouraged to help the school implement, maintain, and evaluate its programs. He considered that this new role was consistent with the concept of school-based budgeting.

The Assistant Superintendent of Curricular Services reported a problem associated with an allocation in one school for a program funded by a conditional grant from the provincial government. The problem concerned the entitlement of the school to the allocation for French when a decision was made by the principal and his staff to discontinue the program.

Two other central office respondents also referred to the change in role in this department, with one noting that initial resistance to school-based budgeting had largely dissipated following the appointment of the Assistant Superintendent in early 1976. Another central office respondent noted the traditional concern in this department that control would be lost if further decentralization occurred, while a fourth perceived a problem with definitions of various items.

Two principals referred to concern among supervisors that standards might suffer while a third reported a reluctance among some supervisors to assist schools in the project.

Personnel Department

The Assistant Superintendent of Personnel reported only one major problem encountered by his department with school-based budgeting. This affected one school which did not budget enough for the costs of substitute teachers. A transfer of funds was approved since the pilot was intended to locate problems of this kind.

Two other central office respondents perceived that personnel in this department also faced a change in role for school-based budgeting, from one of authority in staffing to one of providing a support service. Another central office respondent and one principal recounted the problem with substitute teachers while a second principal perceived a concern among personnel in the Department with respect to the nature of staffing decisions made at the school level.

School Facilities

The Director of Maintenance and Operations reported two problems associated with the pilot but provided an extensive elaboration of his opposition to decentralized decision-making for maintenance.

The Director explained that it was possible to predict needs for the system as a whole with a reasonable degree of accuracy, and budget accordingly. One can similarly determine an average for all schools or, over time, for a particular school. Such predictions cannot be made, however, for particular needs in a particular school for a given year. He illustrated by referring to unanticipated expenditures associated with utilities in extreme temperatures; fire, vandalism, and the breakdown of major items of equipment. He had personally explained this position to each principal in the project.

The two problems reported by the Director illustrated his position. One concerned a break-in, vandalism, and theft, and the other the need to replace an underground tank. In each instance, a disagreement developed with respect to the definition of the items concerned and whether the costs should be met from centralized or decentralized accounts.

Another central office respondent noted the long experience of the Director in his position and his reluctance to involve school personnel who lack experience. He considered the Director to have little flexibility available to him with respect to the deployment of employees and noted a fear among these persons that maintenance tasks may be performed by caretakers under school-based budgeting. Another central office respondent also described this fear. One principal indicated that he was persuaded by the Director's argument with respect to maintenance. Another considered that resistance in the Maintenance Department resulted from a fear that schools could perform certain tasks at a lower cost with decentralized budgets.

The Director of Custodial and Security Services identified many initial problems and concerns in his department. He referred to: (1) inequity in financial allocations for purchase of equipment, since funds from the central budget, pro-rated on the size of the school, may not permit a small school to purchase major items of custodial equipment; (2) the potential problem with contract discussions when one school increased the number of custodians, thus reducing the average floor area to be cleaned; (3) financial coding errors for different types of custodial expenditures, necessitating extra central office monitoring; (4) schools not budgeting for custodial overtime; (5) concerns among custodians that they may be asked to perform additional maintenance tasks, thus violating collective agreements; (6) an attempt by at least two schools to stockpile custodial and other supplies while accounts were still centralized; and (7) at least one instance of a lower standard of lighting as a result of the school endeavoring to save money by not purchasing additional fluorescent tubes.

Principals

The problems reported by principals during interviews are summarized in Table 88. With the exception of lack of financial reporting by central office, described by two respondents, each problem was mentioned only once. Most difficulties were encountered during the preparation phase.

These problems were also recognized by central office respondents. Additional difficulties perceived by the Superintendent and System Planner were: (1) an initial lack of understanding of the concept of school-based budgeting when, for example, some principals believed they would be required to allocate funds for salaries, and (2) the lack of time, guidelines, and awareness of costs for budget preparation.

These problems were reported during interviews in February, 1977, when only part of the school year had elapsed. The researcher observed a meeting of the Superintendent, System Planner, and the

Table 88

Problems Reported During Interviews With Principals in Pilot Project

Stage	Description of Problem[a]
Planning the Pilot	(1) Delay in getting information (2) Whether to partially decentralize maintenance
Preparation of Budget	Role: (1) Concern among caretakers that contracts may be violated (2) The manner in which teaching staff should be involved in allocating funds
	Allocations: (1) Explaining changes to subject supervisors after budgets were adopted (2) Delay in up-grading a secretary to recognize bookkeeping duties (3) Time-tabling (4) Conditional grants by higher levels of government (5) Insufficient allocated for custodians' overtime
Administration of Budget	Accounting: A decision to charge to a school account without consulting principal
	Purchasing: Decision to bill schools for supplies ordered before 1976-77 school year
	Reporting: Lack of reports from central office

[a] Each mentioned once with the exception of that concerned with reports which was mentioned twice.

principals on March 14 during which additional concerns were raised, the chief being the lack of financial information. Schools were concerned that lack of information with respect to surplus or deficit may affect the preparation of budgets for 1977-78. The Controller advised principals that monthly statements would be produced commencing in March with a sub-committee of three principals appointed to investigate alternative formats. Other problems raised by principals included: (1) the community use of school equipment, and (2) the inability of schools to carry forward a surplus for substitutes and non-certificated staff.

Other School Personnel

Principals indicated their perceptions of the problems encountered by other school personnel. The most frequently mentioned concerns of teachers were lack of awareness or information related to the budget and the budgeting process (mentioned three times) and concerns expressed by teachers that their personal interests were affected by the process (mentioned twice). One principal perceived that the latter was associated with increased conflict among staff. One principal reported that the increased burden of clerical work was a problem for secretaries while another referred to the concerns of custodians that contracts may be violated if they were asked to perform maintenance tasks.

The Superintendent and System Planner both indicated that problems of understanding school-based budgeting were encountered by teachers in schools other than those involved in the pilot. One central office respondent perceived a lack of teacher involvement in the process in some pilot schools. Another reported concerns among teachers in two schools that allocations for meeting the costs of substitutes had been reduced, thus creating increased demand for "internal" substitutes.

THE INTEREST OF THE ALBERTA TEACHERS' ASSOCIATION

It was reported in Chapter 5 that The Alberta Teachers' Association had not been called upon to take a position at the provincial level with respect to decentralized school budgeting. The Edmonton Public Local, however, was monitoring the school-based budget pilot project.

Collection of Data

The President of the Edmonton Public Local was invited to provide documents which might relate to the study and to arrange a meeting at which the position of the Local could be discussed. The Executive Secretary, responding for the President, indicated that no documents existed but that a review of the pilot was in progress. It was agreed that the best method of obtaining information with respect to the interest of the Executive was to observe a meeting, attended by principals in the pilot, at which questions and concerns would be raised. The researcher attended the meeting, which was held on March 2, 1977.

Each principal stated his perceptions of the advantages and disadvantages of school-based budgeting and responded to questions and statements of concern related to the practice. A summary of these questions and concerns is contained in Table 89. This information

Table 89

Questions and Concerns Raised at Executive Meeting of Edmonton Public Local of ATA

Classification of Interest	Description of Interest
Planning the Pilot	1. How were schools selected for pilot?
	2. Were teachers involved in the decision to apply?
Preparation of Budgets	
Role	1. The amount of time spent by principal at the expense of educational leadership
	2. Are schools required to defend their allocations?
	3. The negotiating ability of a department head would affect the program offered with the result that inequities will develop.
	4. Were teachers involved in preparing budgets?
	5. Conflict is decentralized with school-based budgeting. Who will arbitrate conflict among staff?
Allocations: Staff	1. How were staff allocations determined by central office? Lack of school involvement in determining system staffing formulae.
	2. Will an increased allocation for staff result in a loss of funds for other purposes? A decreased allocation for staff will not make funds available for other purposes.
	3. School-based budgeting will encourage the hiring of teachers with little or no experience.
	4. What has been the effect of allowing reallocations for staff?
	5. What are the guidelines with respect to allocations for teacher-librarians and counsellors? Guidance and counselling programs may be dropped with school-based budgeting.

Table 89 (continued)

Classification of Interest	Description of Interest
	6. What will be the effect of declining enrolments on allocations for staff?
Allocations: General	1. Were the lump-sum allocations adequate?
	2. Will school-based budgets affect the allocation of school-generated funds?
	3. Will principals tend to cut costs for the sake of economy?
Administration of Budgets	
Role	1. Principals would be assuming a role [of business managers] for which they have had no training.
	2. Teachers may hesitate to be absent, even when necessary, because the money required for a substitute could be allocated for other purposes. Why has there been less teacher absenteeism in some schools in the pilot?
Operational Flexibility	1. Will school-based budgeting operate within a large number of guidelines, each having fairly rigid limits?
	2. Can money saved on substitutes be reallocated for other purposes?
System Implications	1. Will schools be competing for funds? Will schools tend to operate in their own interests rather than consider the interests of the system?
	2. Are subject supervisors still necessary?
	3. Is this not adding another level to the "bureaucracy?"
	4. The Board may reduce allocations if it finds that schools do not require present levels of support for particular items; for example, for substitute teachers.

Table 89 (continued)

Classification of Interest	Description of Interest
Future of the Pilot	1. How long should the pilot operate? 2. What plans have been made to evaluate the pilot? 3. How can teachers be involved in assisting the Executive to develop a position on school-based budgeting?

was obtained from an analysis of the official minutes of the meeting and notes taken by the researcher.

Concerns Raised by the Executive

Table 89 summarizes the questions and concerns raised by members of the Executive. These have been classified according to the phase of the pilot and budgeting process. The concern mentioned most frequently was related to allocations for staff. The researcher perceived that several members were not aware of the procedures adopted for the allocation and reallocation of staff. A number of questions sought clarification of these procedures. Staffing concerns mostly related to decisions which might be made to reduce staff. Another frequently mentioned concern was the role of certificated personnel in the budgeting process. Concern was expressed at the time spent by principals and teachers, the potential for inequities resulting from different levels of negotiating skill, and increased levels of conflict among staff. One issue raised in several contexts was related to allocations for substitute teachers and the pressures on teachers to remain at school. The possibility was also discussed that the Board may reduce system allocations for substitutes and other items if schools did not use the full amount.

THE FUTURE OF THE PILOT

Preparation for 1977-78

The Superintendent and System Planner met with the seven principals on March 14, 1977, to make plans for 1977-78. Principals agreed to develop a three year educational plan for inclusion in their budgets. June 27 was established as the date upon which budgets would be submitted to the Board.

The Future

No decision had been made at the time information was collected with respect to the length of the pilot, the criteria for its evaluation, or whether school-based budgeting would be implemented in all schools. The Superintendent, Associate Superintendent, Assistant Superintendents of Curricular Services and Personnel, the System Planner, and the seven principals were asked to give their opinions on: (1) the length of the pilot, (2) the criteria for its evaluation, and (3) where they would like to see the system in five years' time with respect to school-based budgeting.

The length of the pilot. Table 90 summarizes the opinions of respondents concerning the suggested length of the pilot. The majority of principals responding to this item suggested a longer period than central office personnel. The Superintendent considered that the length of the project was dependent on overcoming shortcomings, and stressed

Table 90

Suggested Duration of Edmonton Public Pilot Project

Duration	Frequency	
	Central Office (N=5)	Principals (N=7)
At least two years	4	2
3-5 years	0	2
5 years	0	1
Conditional	1	1
No response	0	1

the need for an adequate information system. One principal considered that it should operate for one year without problems before system-wide implementation is considered. Principals suggesting periods of more than three years referred to the need for a period of evaluation following the solution of technical problems.

Criteria for evaluation. No criteria have been formally established for evaluation of the pilot. The Superintendent believed that the reaction of school and central office personnel, especially the former, should be obtained. One central office administrator suggested the subjective judgment of the individuals involved, another considered that the project would succeed or fail in relation to the feeling of involvement of principals and teachers, while a third suggested a continuous evaluation of the objectives set by the System Planner. One respondent did not specify criteria but asked:

> How can you evaluate something when you start off with the theory that principals ought to be involved in the decision-making that affects the schools when you find out in practice that many of them don't want to be?

Five of the six principals responding to this item suggested subjective criteria, including a judgment as to whether they (including the students) are "better off" than before, teacher and administrator satisfaction, perceived impact on the classroom program, role in bringing about change, parent and student satisfaction, and effect on the role of subject supervisors. Three principals stated that criteria related to economy should not be employed. One principal did not identify criteria.

School-based budgeting in five years' time. Three central office respondents, including the Superintendent, wished to see all schools have school-based budgeting in five years. Another preferred to await an evaluation of the pilot project but personally preferred a continuation of trends in decentralization. A fifth respondent also preferred a reduction of central office constraints on matters related to school programs.

Only two principals indicated an unconditional preference for all schools to have school-based budgets. Two perceived that many principals not in the pilot were "uncomfortable" about the practice, while another perceived resistance based on lack of information. Two believed that participation should be optional with one of these suggesting that ten to fifteen years may be required before system-wide implementation is possible.

The responses to this item and that related to the length of the pilot suggest that the principals in the project were more cautious in their desire to see an expansion of the practice. The primary factor appeared to be anticipated resistance among principals in other schools, the existence of which was acknowledged by central office respondents.

FURTHER DISCUSSION

The information contained in this chapter is examined further in Chapter 13, where it is consolidated with that reported for other systems included in the second stage of the study. This comparative review, presented against the theoretical background of Chapter 2 and the review of literature in Chapter 3, is organized under the following headings:

Forces Influencing the Adoption of Decentralized School Budgeting.

Objectives of Decentralized School Budgeting.

Change Strategies.

Problems of Implementation.

Preparation and Administration of School Budgets.

Operational Problems.

Disagreements in Decentralized Budgeting.

Attainment of Objectives.

Preferences for Change.

Satisfaction with Decentralized School Budgeting.

Chapter 13

GENERALIZING ANALYSIS FOR SEVEN SYSTEMS

This chapter provides a comparative review of the findings reported in Chapters 6 to 12 related to the objectives, implementation, operation, and perceived outcomes of decentralized school budgeting in seven school systems selected in the first stage of the study. This review is presented against the theoretical background contained in Chapter 2 and the review of literature in Chapter 3.

The analysis in this chapter conforms to the second of two types of empirical analysis for a case study identified by Lipset, et al. (1970:169):

> (a) Description and explanation of the single case, to provide information concerning its present state, and the dynamics through which it continues as it does. This may be called a particularizing analysis.
>
> (b) The development of empirical generalizations or theory through the analysis of a single case, using it not to discover anything about it as a system but as an empirical basis either for generalizations or theory construction. This may be called a generalizing analysis.

These writers note (Lipset, et al., 1970:169) that a generalizing analysis is enhanced if data from more than one case are utilized. This chapter provides such an analysis for the seven school systems considered in the second stage of the study. The limitations of this approach were recognized in Chapter 4.

The material in this chapter is organized according to the various parts of the problem for research associated with the second stage of the study (parts 3 to 12).

Forces Influencing the Adoption of Decentralized School Budgeting (Problem 3)

Respondents in each system provided recollections of the forces which they perceived to underlie the adoption of decentralized school budgeting. A summary of these responses is contained in Table 91 (internal factors--Problem 3.1) and Table 92 (external factors--Problem 3.2) and in the review below.

Bow Corridor (1975). The essential ingredients of a decentralized approach were in place prior to the formation of the Regional District in 1976. Each school had previously worked directly with its board in preparing budgets. The familiarity of the new Superintendent with PAB and his interest in a high level of school decision-making, together with the appointment of principals committed to decentralization, also appeared to be the major factors.

Camrose Public (1974). The practice was introduced as a result of the strong interest on the part of a newly-appointed assistant principal and the increasing concern of some principals at the method of allocating resources in a time of financial restraint. The new Superintendent, who had also expressed interest in decentralization, gave the proposal his support. The opposition of the Board constrained the extent of decentralization in 1974 but the tacit support of the incoming Board permitted a higher degree of decentralization in 1975. PAB provided a convenient framework for the practice.

Foothills School Division (1970). It appears that two factors contributed to the adoption of the practice. The first was the

Table 91

Internal Factors Underlying Decentralized School Budgeting in Seven School Systems

Individual or Group Articulating Interest	Interest	System[a] Bow Corridor	Camrose Pub.	Foothills	Strathcona	Calgary Sep.	Calgary Pub.	Edmonton Pub pilot
Board	Effective financial management	0			0			
	Responding to interest within system		0			0	0	
	Improved "articulation" of system						0	
	Innovation							0
Superintendent	Management strategies based on experience and philosophy	●		●	●			●
	Responding to interest within system		0			0		
Other central office personnel	Improved budgeting				0	0	0	0
	Responding to interest within system					0	0	
Principals	Participation	0	0	0		0		0
	Equity			0	0			
	Flexibility					0	●	
Other school administrators	Past experience of an assistant principal		●					
Teachers	Participation				0	0		0
General	Tradition of school involvement	0						
	Trend to school involvement							0

[a] 0 Identified as a factor.
● Identified as the major factor.

Table 92

External Factors Underlying Decentralized School Budgeting in Seven School Systems

Factor	Description	Bow Corridor	Camrose Pub.	Foothills	Strathcona	Calgary Sep.	Calgary Pub.	Edmonton Pub. pilot
		System[a]						
Legal	Implementation of PAB in Alberta	0	0		0	0		0
	Delegation of curriculum decisions to boards					0		
Political	"Accountability" movement			0	0	0		0
Economic	Financial restraints imposed by government		0		0		0	
	Increasing costs							0
Demographic	Rapid growth of system			0	0	0	0	
	Declining enrolments							0
Technological	Awareness of practice elsewhere				0			0
Cultural	Emerging view of authority in sixties, especially following Vatican Council					0		

[a] 0 Identified as a factor.

realization by the Superintendent and school principals that existing methods for resource allocation were not meeting the needs of schools. This problem was accentuated by the second factor; namely, the rapid growth of the system and the difficulty experienced by the Secretary-Treasurer and his staff in meeting the increasing number of requests for supplies and equipment.

County of Strathcona (1974). Several factors acting in combination appear to have contributed to a measure of dissatisfaction with previous budgeting practice and a receptive atmosphere for the proposals of the new Superintendent, who was generally perceived to be the critical force for change. The rapid growth of the County and the increasing diversity within and between schools meant an increased burden of work at central office. The "accountability" movement and the financial restraints of the provincial government drew the attention of the School Committee and central office administrators to the method of allocation, which was perceived to be wasteful. Principals also became aware of differences in allocations between schools and expressed a desire for a more equitable system. Teachers also expressed a desire for greater involvement in decision-making. The introduction of PAB in 1974 appears to have facilitated the change.

Calgary Separate (1968-75). The change from a relatively centralized to a relatively decentralized practice occurred in a series of stages rather than in a single instance of planned change. No person or group emerged as the major force for change. The desire on the part of principals to be more involved in decision-making was generally recognized while the rapid growth of the system and the consequent increase in the workload at central office were also cited. The "accountability" movement and the selection of the system in the PPBS pilot project were external factors.

Calgary Public (1974). The concern expressed in 1970 by principals on two committees that existing methods of allocation failed to meet the needs of schools at a time of greater flexibility in the curriculum appeared as the major factor. A third committee, representing the Business Affairs Division, reported difficulty in controlling equipment and supplies' budgets. The recommendations of these committees resulted in a pilot project in decentralized school budgeting from 1971 to 1973. The practice was adopted in all schools in 1974 following a major system reorganization in the fall of 1973 which responded to a broad interest in decentralization. The rapid growth of the system and financial restraints instituted by the provincial government were cited as external factors.

Edmonton Public Pilot (1976). The major factor underlying the Edmonton Public pilot project was the management style of the Superintendent and his perception that existing budget practice was not responsive to the needs of over 150 different schools. These perceptions were shared by some central office personnel and principals. A general trend to decentralization and pressure associated with rising costs and declining enrolments were cited as external factors.

Discussion. The findings are generally consistent with the theoretical background and review of literature in education presented in Chapters 2 and 3. The following points summarize this consistency:

1. The changes occurred in the manner suggested by Katz and Kahn (1975:67) who considered organizational change to be a consequence of disequilibrium generated by "(1) changed inputs from the environment including the organizational supersystem, and (2) internal strain or imbalance." In addition to the external factors summarized above, the "inputs from the environment" included the appointment of new Superintendents in Bow Corridor, Camrose Public, Foothills, and Strathcona, the election of a new board in Camrose Public, the appointment of new principals in Bow Corridor, the appointment of an assistant principal in Camrose Public, and generally, the hiring of principals and teachers with an interest in participation. Support for the primacy of external forces noted by Katz and Kahn (1975:71) and Scott and Mitchell (1976:324) is also provided by the "internal strain or imbalance" resulting from external factors. For example, the rapid growth in enrolment in Foothills, Strathcona, Calgary Separate and Calgary Public created pressures on central office personnel responsible for allocating resources in the system. A decentralization of some aspects of curriculum from the provincial to the board levels and a prevailing interest in diversifying programs at the school level had the same effect. The requirements of PAB facilitated the change in most systems.

2. The factors identified in organizational theory as being associated with the adoption of decentralized structures were evident in several systems. The rapid growth of pupil enrolment and the general, increased diversity between and within schools with respect to program represent instances, for central office personnel, of "environmental

uncertainty" (Lawrence and Lorsch, 1967), "a high degree of complexity" (Price, 1968), "unanalyzable search behaviour" and "many exceptions" (Perrow, 1970). All are consistent with Katz and Kahn's (1966:233) view that "decentralization is the deliberate restructuring of an organization to handle [information] overload."

3. The Superintendent was identified as a major factor in four of the systems (Bow Corridor, Foothills, Strathcona, and Edmonton Public) and, to a lesser extent in another (Camrose Public). The experience in these systems is thus similar to that reported in California by Seward (1976:8), who noted that, in suburban districts, "typically the pressure for decentralization . . . has come from superintendents primarily interested in participative management . . . ." The influence of community interest groups, reported in studies of decentralization in urban areas in the United States (O'Shea, 1974) was not apparent in this Alberta study.

4. Neal (1964) and Miklos (1970, 1974) described the increasing professionalism and expertise among educators as forces promoting decentralization. This factor was frequently cited in Calgary Separate and noted in most other systems.

5. The "accountability" movement was cited in four of the seven systems. Decentralized school budgeting is apparently viewed by some persons as a means of achieving accountability at the school level. This is consistent with the positions of Greenfield (1972) and Taylor (1973) who felt that, if a program of accountability is to work, there must be an increase in the autonomy and responsibility principals and teachers feel for the conduct of affairs in their schools.

6. The development of computer technology was not explicitly identified during interviews as a factor underlying the adoption of decentralized school budgeting. It was apparent in responses to other items, however, that the introduction of modern business machines and, in some instances, the computer, facilitated the practice.

Objectives of Decentralized School Budgeting (Problem 4)

Formally stated objectives (Problem 4.1). A review of documents revealed that the extent to which objectives for decentralized school budgeting had been formulated varied from Bow Corridor and Calgary Separate, where no statements were located, to Calgary Public where ten objectives were established from the outset of the pilot project in 1971.

Objectives were implied in related documents in three school systems. The board minutes in Foothills (Foothills School Division #38, 1970), which recorded approval of a proposal to establish mini-budgets, indicated that the practice had the following purposes:

1. To develop greater responsibility in ordering by the school staffs.
2. To reduce central office labor.
3. To increase opportunity for individual schools to divert funds into their individual areas of need.

A statement of policy prepared in Camrose Public (Camrose School District #1315, 1977) for budgeting in 1977 implied an objective of equity in that "there shall be a fair distribution of District money to all schools." The introduction to the first budget manual prepared in the County of Strathcona (County of Strathcona #20, 1974) in 1974 implied an objective of flexibility at the school level since the practice was intended to provide "freedom for principals and staff to draw up their estimates according to the types of program they wanted to run."

The Decentralized Budget Committee in Calgary Public (Calgary Public School Board, 1971:2) formulated the following objectives for the practice in that system:

1. To provide for greater school freedom and increased responsibility.
2. To provide greater flexibility to the schools for programs as they relate to community needs.
3. To encourage school and teacher innovativeness.
4. To encourage and facilitate the examination of program outcomes in relationship to the costs involved.
5. To encourage increased teacher satisfaction through involvement in the decision-making regarding the allocation of the resources to various school programs.
6. To obtain more efficient use of the dollars alloted to each school.
7. To reduce the reaction time required to meet changing school needs whether they be local or throughout the system as a whole.
8. To alleviate to a degree, the problems presented at the school level due to change in teacher staff in the middle of a budget year.
9. To promote the principle that school equipment and supplies belong to the school as a whole and not to a specific department.
10. To reduce fragmentation of the system and the identifying of certain schools for special consideration.

The sixth and tenth objectives were deleted in a later formulation of this list (Calgary Public School Board, 1972:4).

The following purposes for school-based budgeting were included in a report (Parry, 1976:1-2) submitted to the Board in Edmonton Public:

(a) To provide principals and teachers with an appropriate and effective role in the decision-making process in education.

(b) To develop a valid system of accountability.

(c) To ensure the effectiveness of the expenditure of the educational dollar.

(d) To give the budget process, and the budget document a direct educational focus and make it a useful management tool.

Perceptions of central office administrators and principals (Problem 4.2). Respondents were asked to indicate their perceptions of the value of eight objectives derived from the review of literature in Chapter 3 and the documents provided by school systems in the first stage of the study. These objectives may be broadly classified as relating to the principle of subsidiarity (two), equity, efficiency, flexibility, innovation, adaptability, and accountability. The summary of responses in Table 93 indicates the objectives which were generally highly valued, that is, were perceived to have "much" or "great" value by a majority of the respondents in each group. Additional objectives identified by individual respondents in the systems are not included in Table 93.

A different procedure was used in Edmonton Public where the structured items related to objectives were not presented to respondents. Perceptions of central office administrators and principals were gathered in an open question and then classified according to the objectives listed in Table 93, where the responses are summarized.

Discussion. The following summarizes the features of Table 93.

1. Objectives related to the principle of subsidiarity, efficiency, flexibility, and accountability were generally highly valued in the

Table 93

Perceptions of Central Office Administrators and Principals[a] in Seven Systems on Value[b] of Objectives of Decentralized School Budgeting

Objective		Bow Corridor		Camrose Public		Foothills		Strathcona		Calgary Separate		Calgary Public		Edmonton Public[c]	
Category	Description	COA	P	COA	P	COA	P	COA	P	COA	P	COA	P	COA (N=5)	P (N=7)
Subsidiarity	To provide the principal with an appropriate role in the decision-making process for the allocation of funds	H	H	H	H	H	H	H	H	H	H	H	H	3	4
Subsidiarity	To provide teachers with an appropriate role in the decision-making process for the allocation of funds	H	H	H	H	H	H	H	N	H	H	H	H		
Equity	To provide a more equitable allocation of funds among schools	N	H	H	H	H	H	H	H	N	N	H	H	0	0
Efficiency	To obtain more efficient use of funds allocated to each school	H	H	H	H	H	H	H	H	H	H	H	H	1	2
Flexibility	To provide schools with greater flexibility in the development of the instructional program	H	H	H	H	H	H	H	N	N	H	H	H	2	1
Innovation	To encourage school and teacher innovativeness	N	H	H	N	H	H	H	N	N	N	H	H	0	0
Adaptability	To reduce the time required to meet changing school needs	H	H	H	H	H	H	N	N	H	H	H	H	0	0
Accountability	To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	H	H	H	H	N	H	H	H	H	H	H	H	0	1

[a] COA: Central Office Administrators; P: Principals.

[b] H=highly valued objectives; that is, perceived by a majority of group to have "much" or "great value"
N=not highly valued; that is, perceived by a majority of group to have only "some," "little," or "none."

[c] Frequency of identification of objective in an open question.

seven systems. In elaborating their responses, those interviewed discussed the principle of subsidiarity in terms of placing certain budget decisions as close as possible to where the decisions are to be effected. Efficiency was related to the desirability of overcoming the wastefulness of allocations made in a scale of issue determined centrally where schools received items whether they required them or not. The objective of flexibility was discussed in terms of meeting the different program needs of schools while the objective of accountability was expressed as the desirability of school personnel becoming more aware of the costs of programs.

2. The objective of equity was the subject of comment in two systems where decentralized budgeting was not introduced at the same time as standardized per pupil allocations. The Superintendent in Bow Corridor explicitly excluded such allocations in his system where the amounts in school budgets were based on expenditure patterns established prior to the formation of the Regional District. He considered that equity in terms of "meeting needs" was a more appropriate objective. Respondents in Calgary Separate indicated that standardized allocations were made prior to the introduction of decentralized budgeting.

3. The objective associated with innovation was not a highly valued objective among at least one group of respondents in five of the seven systems. One explanation might lie in the different climate for innovation at the time of this study compared to that when the objectives identified in the literature were formulated. Rowe and Boise (1974:287) noted, for example, that innovative behavior is associated, among other things, with "uncommitted resources." The prevailing financial restraints

reported in this study may preclude an association between decentralization and innovation.

4. Objectives identified in open responses were consistent with those listed in Table 93. In only three instances did individuals formulate different objectives: (i) to provide trustees with an appropriate role in the decision-making process for the allocation of funds (Superintendent in Bow Corridor), (ii) to facilitate long-range planning (a central office administrator in the County of Strathcona), and (iii) to reduce the workload at central office (an area superintendent in Calgary Public).

5. There was generally no important difference between central office administrators and principals with respect to their perceptions of the objectives. Only in Bow Corridor and the County of Strathcona did differences occur on more than one objective.

Change Strategies (Problem 5)

Except for the Edmonton Public pilot project, decentralized school budgeting was implemented in each system as a result of a decision which required all schools to adopt the practice, that is, there was no instance where schools had discretion to remain with the more centralized type of budgeting. As a consequence, the various strategies associated with the diffusion of innovations, where the school is the unit of change, were not apparent in this study. It was evident in the two largest systems that allowing schools discretion to participate raised serious questions of feasibility. The recommendation of the Decentralized Budget Committee in Calgary Public that participation be voluntary in 1973 was not implemented and the eleven-school pilot continued until 1974 when all schools were required to adopt the practice. Respondents in the Division of Support Services referred to the difficulty of maintaining a dual system of budgeting. Respondents in the Finance Department in Edmonton Public acknowledged the same concern.

An analysis of the strategies of change employed in the adoption of decentralized school budgeting, considering the system as the unit of change, may be undertaken for each of two stages: (1) the events culminating in the decision to adopt the practice, and (2) securing the involvement of schools. These two steps are considered below.

Strategies prior to decision to adopt. The change strategies employed prior to the decision to adopt the practice generally conformed to a "shared" strategy, in the formulation of Greiner (1973:49-52), or a "normative" strategy, in the formulation of Jones (1969:116-118), in that the initiators of change worked with other system personnel to determine the nature of the practice prior to the decision to implement. The nature and extent of participation varied, from instances where the superintendent or his representative(s) discussed the matter with all principals and those central office personnel concerned with budgeting, as in Bow Corridor, Camrose Public, Foothills, Strathcona, and Calgary Separate, to Edmonton Public and Calgary Public, where committees were established to recommend the nature of the practice.

The superintendent moved from a "shared" or "normative" strategy to a "unilateral" or "coercive" strategy in two instances; namely, in Camrose Public, where principals suggested implementing the change over a three-year period rather than an immediate change desired by the Superintendent, and in Edmonton Public, where a series of committees failed to recommend a change to the extent desired by the Superintendent.

The formulation of Chin and Benne (1969) is difficult to apply in this analysis. While the strategies of the Superintendents in Camrose Public and Edmonton Public shifted to a "power-coercive" mode in the manner outlined above, none of the tactics of the "empirical-rational" or "normative-reeducative" patterns were clearly apparent. The various interests identified in the section of this chapter related to forces influencing the adoption of the practice suggest that persons at different levels perceived a need to change and were thus receptive to proposals for decentralized school budgeting. The attempts by the initiators of change to draw upon this "self-interest" during, for example, meetings between a superintendent and principals, is consistent with an "empirical-rational" approach. Two specific instances of an "empirical-rational" strategy were apparent in the Bow Corridor and Calgary Public cases where, in the former, the Superintendent selected three new principals using the criterion of interest in a decentralized approach and, in the latter, where information concerning the pilot project was circulated to all schools prior to the distribution of a ballot to determine the interest of principals.

Securing the involvement of schools (Problems 5.2-5.5). All schools were required to adopt the procedures associated with decentralized school budgeting in each of the systems other than Edmonton Public. The change strategies designed to secure the involvement of schools thus required a component which conformed to the "power-coercive" and "unilateral" patterns. Jones' (1969:116-118) notion of a "utilitarian" strategy may also be applied since the strategies were characterized by central control over the material resources and rewards associated with the position of the principal; that is, the principalship was conditional on compliance. This component appeared to be especially applicable in Calgary Public, Calgary Separate, and Strathcona where there was evidence of some principals opposing the practice.

Table 94 summarizes aspects of the change strategies designed to secure the involvement of schools. This information responds, in particular, to parts 5.2-5.5 of the problem statement. Jones' (1969:116-118) notion of a "neutral" strategy involving technical modifications and communications best describes the series of in-service activities which represented the focus of this aspect of the change process. Greiner's (1973:49-52) use of "shared" strategy is also applicable. The expectation that such activities would result in changes in attitudes, values and skills in addition to changes in knowledge of budgeting procedures implies a "normative-reeducative" strategy in the Chin and Benne (1969) formulation.

The information in Table 94 indicates that the period of time required to implement the practice varied from one to five years, with Calgary Separate implementing its practice in a series of stages over eight years. Only the two largest systems have employed pilot projects. The superintendent was the primary source of assistance to schools in the smaller systems (Bow Corridor, Camrose Public, and Foothills) while the (then) Deputy Superintendent performed this service in the County of Strathcona. Different combinations of central office personnel assisted in Calgary Separate while committees consisting of central office personnel and principals guided implementation in Calgary Public. The

Table 94

Strategies for Implementation of Decentralized School Budgeting in Seven Systems

	Strategies for Implementation			
System	Period of Time Required (Problem 5.2)	Pilot Projects (Problem 5.3)	Individuals or Groups Providing Major Assistance to Schools (Problem 5.4)	In-Service Activities for Central Office and School Personnel (Problem 5.5)
Bow Corridor	Implementation incomplete (commenced in 1975)	None	Superintendent	1. Four-day retreat for Superintendent and principals 2. Two sessions with secretaries
Camrose Public	Three years (1974-1976)	None	Superintendent	Superintendent with principals at regular meetings of Principals' Association
Foothills	One year (1970)	None	Superintendent	Superintendent with principals at regular meetings of Principals' Association
Strathcona	Two years (1974-1975)	None (Superintendent considered first year a pilot)	Deputy Superintendent (now Superintendent)	1. One-day in-service for central office personnel, principals, assistant principals and secretaries 2. Central office administrators meeting with principals at regular meetings of Principals' Association
Calgary Separate	In stages over eight years (1968-1975)	None	Senior central office administrators. Secretary-Treasurer (2)	Central office personnel with principals at Principals' Councils
Calgary Public	Five years (1970-1974)	Eleven schools (1971-1973)	1. Decentralized Budget Committee (pilot) 2. Decentralized Budget Monitoring Committee (system implementation) Both committees included principals and central office personnel from Division of Instruction and Division of Support Services	Fifteen days consisting of sets of three days in each of the five areas of system. Conducted by members of Committee for principals, assistant principals, and secretaries
Edmonton Public	Pilot project commenced 1976-1977	Seven schools	System Planner	System Planner meeting with principals on twelve occasions during the year

System Planner coordinated the change in the Edmonton Public pilot project. In-service activities varied from regular meetings of the superintendent and principals and informal sessions with secretaries in the smaller systems to the fifteen days of seminars conducted for principals, assistant principals, and secretaries in Calgary Public. A four-day retreat for the Superintendent and all principals in Bow Corridor, at which budgets were prepared and a district policy handbook was drafted, represented the most comprehensive and intensive activity.

Changes in structure, personnel, and role (Problem 5.1). Part 5.1 of the problem statement sought information concerning the changes in organizational structure, personnel, and roles which were associated with the implementation of decentralized school budgeting.

Few instances of structural change were located which were directly associated with the implementation of the practice. Major changes instituted during the change process in Bow Corridor (formation of Regional District), County of Strathcona (appointment of more central office administrators, including an Assistant Superintendent of Business Administration), and Calgary Public (establishment of area units of administration) were designed to achieve a variety of purposes in addition to facilitating a decentralized approach. Only in Bow Corridor were instances revealed of structural change at the school level related directly to decentralized budgeting. Four division heads rather than two assistant principals were appointed in one school and subject committees were realigned in another.

In only one system was evidence provided that the number of staff was changed to facilitate the implementation of the practice. The

Treasurer of Calgary Public reported that the equivalent of one additional full-time person was required. Appointments which met the needs of a decentralized school budgeting system, in addition to other purposes, were the hiring of a Purchasing Agent in Foothills and an Assistant Superintendent of Business Administration in the County of Strathcona.

There were, however, major changes in the roles of school system personnel. The majority of principals in all systems where a judgment was possible reported that: (1) principals, other school administrators, teachers, and school secretaries devoted more time to the preparation of budgets and purchasing as a result of the change, and (2) principals and secretaries (or business managers) devoted more time to record-keeping, although other school personnel were not required to perform this task. All superintendents reported that they spent the same amount of time on the preparation and administration of school budgets while central office personnel in non-instructional areas who were involved in school budgeting reported spending more time. The major change in role among central office administrators concerned subject supervisors in the larger systems who were no longer required to prepare budget estimates and control expenditure in school accounts which they previously controlled.

Trustees gave consideration to school budgets in four systems; namely, Bow Corridor, Camrose Public, County of Strathcona, and the Edmonton Public pilot project. This represented a new task for trustees. School budgets in Foothills, Calgary Separate, and Calgary Public were integrated into the system budget in each instance with only the latter considered by the board. However, the amount of the per pupil allocations which formed the bases of the decentralized allocations were subject to the approval of trustees in these three systems.

No structural or personnel changes were made in Edmonton Public to implement the pilot project. However, the roles of many people were affected. Similar changes for school personnel as outlined above were reported while, at central office, all persons associated with school budgeting were required to provide information on previous expenditure patterns for the seven schools. The reallocations in the decentralized accounts submitted by principals were not, however, subject to change by central office administrators unless they were incompatible with the guidelines of the project. The Finance Department was required to provide information related to the pilot on a continuing basis throughout the year, while the System Planner assumed a much-expanded role in budgeting in coordinating this project.

Problems of Implementation
(Problem 6)

The generalizing analysis contained in this section is limited to the problems encountered during system-wide implementation in the six systems other than Edmonton Public. Problems encountered in the pilot projects in Calgary Public and Edmonton Public are outlined in Chapters 11 and 12, respectively.

Implementation problems encountered by central office personnel (Problem 6.1). Table 95 summarizes the problems reported for trustees (considered as central office personnel for purposes of this analysis), superintendents, and other central office personnel. Those reported for trustees and superintendents were generally restricted to systems where these persons were directly involved in the preparation or administration of school budgets. In some instances, notably Bow Corridor, these were

Table 95

Problems Encountered by Central Office Personnel During Implementation of Decentralized School Budgeting[a]

Persons	Phase	Category	Description of Problem	System in which Problem Reported[b]
Trustees	Preparation	Role	1. Opposition to decentralized budgeting	C
			2. Unfamiliarity with new roles of supervisors	CP
		Allocations	1. Complexity of PAB	B
			2. Lack of base-line data for comparisons	B
			3. Insufficient funds for small schools	CP
	Administration	Role	1. Difference with superintendent on distribution of authority	B
		Purchasing	1. Concern that school expenditure varied from estimates	F
Superintendent	Preparation	Role	1. Initial resistance of board and principals	C
		Allocations	1. Different tax bases among constitutent districts	B
			2. Banff plebiscite	B
			3. Difficulty in predicting population shifts	B
	Administration	Purchasing	1. PAB classification and coding	C
		Control	1. Lack of time	B
			2. Problems in communication with system personnel	B
Other central office --non-instructional	General	Role	1. Resistance to change	CS
	Administration	Purchasing	1. PAB classification and coding	C, CP
			2. Delays	F
			3. Incorrect procedures by schools	B, C, S, CP
		Reporting	1. Establishing procedures for reporting to schools	B, C, F, CP

[a] Problems in pilot projects in Calgary Public and Edmonton Public are not the subject of generalizing analysis. These are outlined in Chapters 11 and 12, respectively.

[b] B = Bow Corridor; C = Camrose Public; F = Foothills; S = County of Strathcona; CS = Calgary Separate; CP = Calgary Public.

Table 95 (continued)

Persons	Phase	Category	Description of Problem	System in which Problem Reported[b]
Other central office --instructional	General	Role	1. Resistance by subject supervisors	CS, CP
	Administration	Purchasing	1. PAB classification and coding	CP
			2. Incorrect procedures by schools	CP
General	General	Role	1. Concern at extent of decentralization	S, CP
			2. Becoming accustomed to new roles as resource people	S
			3. Concern at lack of skill and experience of school personnel	CS
			4. Lack of familiarity of area superintendents with their role	CP
	Administration	Purchasing	1. Volume of requests by schools	CP

[a] Problems in pilot projects in Calgary Public and Edmonton Public are not the subject of generalizing analysis. These are outlined in Chapters 11 and 12, respectively.

[b] B = Bow Corridor; C = Camrose Public; F = Foothills; S = County of Strathcona; CS = Calgary Separate; CP = Calgary Public.

associated with circumstances peculiar to the system. Each of these problems was reported in only one system.

Two problems were common to four systems. These described incorrect procedures employed by schools during the administration phase of the budget process and the difficulties of establishing procedures for reporting to schools. Two problems associated with role were identified in two systems. These concerned resistance to decentralization offered by some subject supervisors in Calgary Public and Calgary Separate and a concern in the County of Strathcona and Calgary Public at the extent of decentralization. An additional problem, also mentioned in two systems, was the difficulty associated with the use of PAB classifications and the coding and definition of the various items of expenditure. This problem was identified in Camrose Public and Calgary Public, where decentralized budgeting was implemented in the same year (1974) in which the Department of Education required the use of the PAB systems.

Implementation problems encountered by school personnel (Problem 6.2). Table 96 summarizes the problems reported for school personnel in the systems under consideration in this section.

A number of common problems were encountered by principals. Difficulties associated with the PAB classification and coding were reported in five systems. Problems reported in four systems were the lack of skill and experience among some principals in preparing budgets, inadequate guidelines given schools during the preparation phase, and accounting difficulties associated with the difference between actual and estimated costs as a result of inflation, freight charges, and

Table 96

Problems Encountered by School Personnel During Implementation of Decentralized School Budgeting[a]

Persons	Phase	Category	Description of Problem	System in which Problem Reported[b]
Principals	Preparation	Role	1. Preparing several budgets (Banff)	B
			2. Lack of skill and experience	B, S, CS, CP
			3. Inclusion of maintenance	B
			4. Increased workload	F, S, CS
			5. Reluctance to accept role	CP
		Allocations	1. Inadequate guidelines	B, C, F, CP
			2. Insufficient funds	B, S, CP
	Administration	Role	1. Lack of skill and experience	S, CP
			2. Workload	CP
		Purchasing	1. Coding in the PAB format	B, C, S, CS, CP
			2. Delays	F, S, CS
			3. Mix-ups	S
		Accounting	1. Difference between actual and estimated costs	B, C, S, CS
			2. Disagreements with central office on amounts	F
			3. Amounts of surpluses and deficits	CP
		Transfers	1. Delay in approval	S, CS
		Control	1. Over and under-expenditure	CS
		Reporting	1. Adequacy and frequency	B, CP

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[a] Problems in pilot projects in Calgary Public and Edmonton Public are not the subject to generalizing analysis. These are outlined in Chapters 11 and 12, respectively.

[b] B = Bow Corridor; C = Camrose Public; F = Foothills; S = County of Strathcona; CS = Calgary Separate; CP = Calgary Public

Table 96 (Continued)

Persons	Phase	Category	Description of Problem	System in which Problem Reported[b]
Teachers	Preparation	Role	1. Increased workload in preparation	S, CP
			2. Lack of involvement of some teachers	S, CS, CP
		Allocation	1. Insufficient funds	B
			2. Jealousy among teachers	C
			3. Inadequate guidelines	F
	Administration	Purchasing	1. Delays	CP
		Accounting	1. Lack of uniform bookkeeping in a school	B
		Transfer	1. New teachers seeking to change allocations	B
Secretaries	Administration	Role	1. Lack of familiarity with procedures	S
			2. Increased workload	CP
		Purchasing	1. Coding in the PAB format	B, S
			2. Delays	S
		Accounting	1. Difference between actual and estimated expenditure	S

[a] Problems in pilot projects in Calgary Public and Edmonton Public are not the subject of generalizing analysis. These are outlined in Chapters 11 and 12, respectively.

[b] B = Bow Corridor; C = Camrose Public; F = Foothills; S = County of Strathcona; CS = Calgary Separate; CP = Calgary Public.

other "hidden" expenses. Problems reported in three systems were the increased workload for some principals, insufficient funds in decentralized accounts, especially for small schools, and delays in receiving purchases. Problems reported in two systems were a lack of skill and experience among some principals in administering budgets, delays in receiving approval for transfers, and inadequate reporting procedures.

The major problem affecting teachers was related to their role in the preparation process. Concern was expressed in three systems at either a lack of involvement or an excessive workload in preparation. The problems affecting secretaries were similar to those reported for other school personnel during the administration phase.

Discussion. The problems identified in this study are generally consistent with those suggested in the review of theory and practice in Chapters 2 and 3, respectively. For example, McNutt's (1975) study of the implementation of a system of school-based management in Florida found evidence of role conflict and problems in communication while Brick (1971) found a high level of anxiety among central office administrators concerning a perceived loss of control and among teachers because of demands made on their time. Some of the potentially dysfunctional aspects of a budgeting system noted by Irvine (1970) also appeared; namely, role conflict, failure to communicate information on planned and actual results, difficulties in estimating costs, and incorrect assignment of costs.

Several problems were associated with the PAB system which was implemented at the same time as decentralized budgeting in four of the systems (Camrose Public, County of Strathcona, Calgary Public and in an early phase of the change process in Calgary Separate) while in a fifth system, Bow Corridor, the relatively high degree of decentralization in 1976 represented the first experience with PAB for some school personnel. These problems were not identified in Foothills where the PAB format was not used by school personnel in the preparation and administration of mini-budgets.

Preparation and Administration of School Budgets (Problem 7)

This section of the generalizing analysis focuses on the major similarities and differences in the processes of preparation and administration of decentralized school budgets in the seven systems under consideration.

Preparation of budgets. Simplified representations of the preparation processes are contained in Figure 5 for Bow Corridor, Camrose Public, Foothills and the County of Strathcona, and in Figure 6 for Calgary Separate, Calgary Public and the Edmonton Public pilot project. Many of the differences among the systems reflect the different criteria which determined the selection of systems in the second stage of the study. For example, Calgary Separate had no provision for schools to submit a budget for approval at a higher level--it is highly centralized during the preparation phase but highly decentralized in the administration phase considered below. The principals in the smaller systems of Bow Corridor, Camrose Public, and Foothills work directly with their Superintendents while those in the County of Strathcona, Calgary Public and Edmonton Public communicate directly with other central office administrators. The unique structural characteristics of Bow Corridor (the

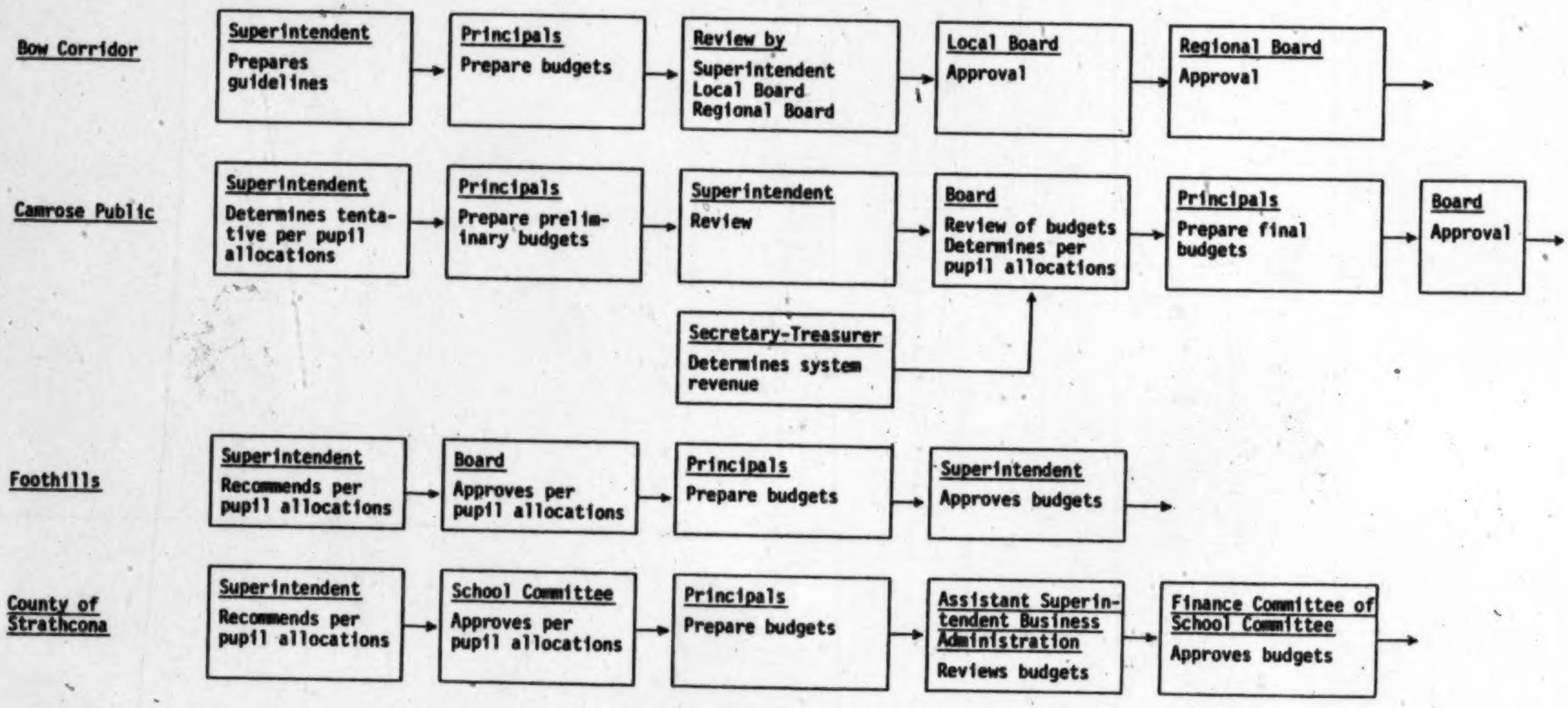
Bow Corridor
Superintendent
Prepares guidelines
Principals
Prepare budgets
Review by
Superintendent
Local Board
Regional Board
Local Board
Approval
Regional Board
Approval
Camrose Public
Superintendent
Determines tentative per pupil allocations
Principals
Prepare preliminary budgets
Superintendent
Review
Secretary-Treasurer
Determines system revenue
Board
Review of budgets
Determines per pupil allocations
Principals
Prepare final budgets
Board
Approval
Foothills
Superintendent
Recommends per pupil allocations
Board
Approves per pupil allocations
Principals
Prepare budgets
Superintendent
Approves budgets
County of Strathcona
Superintendent
Recommends per pupil allocations
School Committee
Approves per pupil allocations
Principals
Prepare budgets
Assistant Superintendent Business Administration
Reviews budgets
Finance Committee of School Committee
Approves budgets

Figure 5

Preparation Process for Decentralized Budgets in Bow Corridor, Camrose Public, Foothills, and County of Strathcona[a]

[a] Each stage of review and approval may result in a return of budget to a preceding stage for amendment.

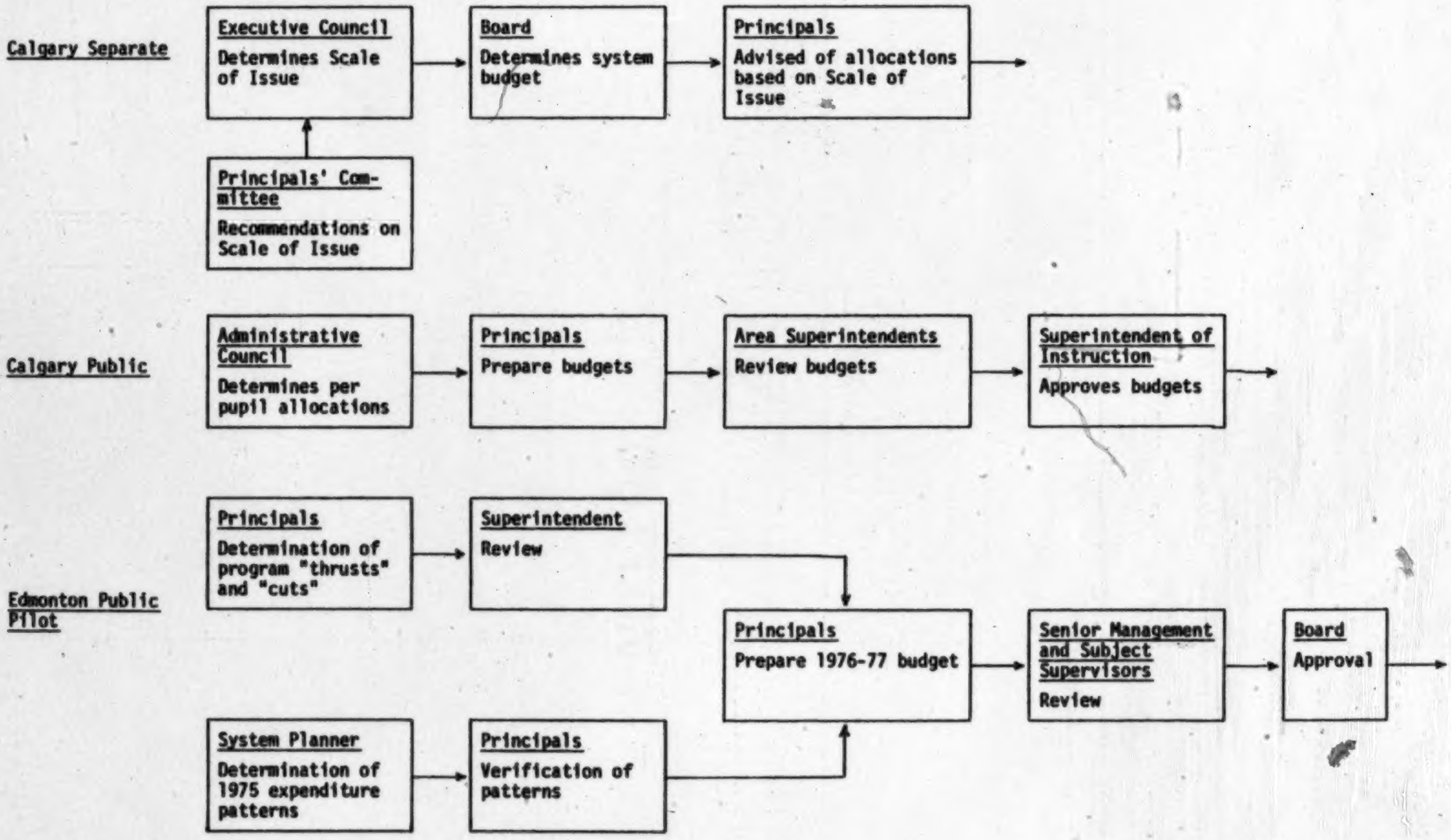
Calgary Separate
Executive Council
Determines Scale of Issue
Board
Determines system budget
Principals
Advised of allocations based on Scale of Issue
Principals' Committee
Recommendations on Scale of Issue
Calgary Public
Administrative Council
Determines per pupil allocations
Principals
Prepare budgets
Area Superintendents
Review budgets
Superintendent of Instruction
Approves budgets
Edmonton Public Pilot
Principals
Determination of program "thrusts" and "cuts"
Superintendent
Review
Principals
Prepare 1976-77 budget
Senior Management and Subject Supervisors
Review
Board
Approval
System Planner
Determination of 1975 expenditure patterns
Principals
Verification of patterns

Figure 6

Preparation Process for Decentralized Budgets in Calgary Separate, Calgary Public and Edmonton Public Pilot[a]

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[a] Each stage of review and approval may result in a return of budget to a preceding stage for amendment.

Regional Board in addition to the local District Boards) and Calgary Public (the area units of administration) are associated with an additional budget review stage.

The similarities with respect to the procedures at central office (Problem 7.1) lie in the determination at this level of the constraints and guidelines to be observed by schools. Standardized per pupil allocations are determined at this level in five systems (Camrose Public, Foothills, Strathcona, Calgary Public, and Calgary Separate) while lump-sum amounts determined on the basis of previous patterns of expenditure in each school, with adjustments for inflation and changes in enrolment and program, are calculated in the other two systems (Bow Corridor and Edmonton Public). Central office personnel were involved again following submission of school budgets, when allocations were checked for conformity with constraints and guidelines. Boards considered individual school budgets in only four instances; namely, Bow Corridor, Camrose Public, Strathcona, and Edmonton Public.

There was a variety among the systems and within each system with respect to procedures employed at the school level (Problem 7.2). The major points of difference were associated with the nature and extent of teacher involvement, the length of preparation time required, and the nature of the budget document submitted by the principal.

Three general patterns of staff involvement were evident. One saw the principal working by himself to prepare a budget, with little systematic collection of information from teachers. The second type, which was described most frequently by respondents in each system, involved the formal submission of estimates of needs by teachers with the principal consolidating these in a budget. Requests were often submitted to department heads, who sometimes served as a budget committee, in the larger schools in each system. The third type added a review and adoption process involving the staff as a whole to the procedures outlined for the second type. An assistant principal was sometimes designated as the coordinator of the preparation phase for each of the three types. M.E. LaZerte High School in Edmonton Public was the only instance where parents were involved in budgeting.

The period of time required to prepare budgets varied from less than a week in instances of minimal staff involvement to two months or more with extensive staff involvement. Preparation typically occurred in the period from September to December except in Edmonton Public, when budgets for 1977-78 were prepared from March to June, and in Foothills, where principals submit estimates to the Superintendent in February.

A variety of formats were used in the preparation of budget documents. These conformed to guidelines established by central office personnel in each system. Differences were apparent with respect to the extent of utilization of the PAB classification and the amount of supporting information submitted with the budget. Table 97 summarizes the major points of difference, which varied from a one page line-item budget without supporting information submitted by principals in Foothills to documents of up to one hundred pages submitted by principals in the Edmonton Public pilot. Principals in Edmonton Public were encouraged to relate the budget to a three-year educational plan.

Principals interviewed in Calgary Separate were asked to give their perceptions of the extent to which a budget was prepared at the

Table 97

Nature of Budget Documents Prepared by Principals in Six Systems

System	Utilization of PAB Classification	Nature of Supporting Documentation
Edmonton Public pilot	First level object, Program	Substantial documentation, with principals encouraged to relate budget to a three-year educational plan
Calgary Public	Third level object,	Varied from none in one area to statements of objectives and descriptions of programs in others
Bow Corridor	Third level object, Subprogram, Function	Not required
County of Strathcona	Second level object, Function	Description of items required
Camrose Public	Second level object	Not required
Foothills	Not used--line-item in broad categories	Not required

school level when schools have the discretion to reallocate the lump-sum of the scale of issue. It was apparent from the analysis that no general pattern of budget preparation or teacher involvement had emerged. Administrators, department heads and, in elementary schools, selected teachers, usually met early in the year to identify areas of expenditure with reallocation of unexpended funds made in September or October. The scale of issue formed the basis of expenditure patterns in many schools.

Administration of budgets. Table 98 summarizes the major features of the procedures adopted for the administration of decentralized budgets in the seven systems for 1977.

The procedures employed at the central office level (Problem 7.1) are indicated in Table 98 for each of the processes of transfer, control, purchasing, and reporting to schools. The limits of school discretion to transfer from one category of a budget to another following the adoption of the system budget by the board vary from system to system and represent one aspect of the control function. This control is exercised by scrutiny of requisitions in some systems and the monitoring of records in all. A variety of procedures have been adopted for reporting to schools ranging from periodic statements without details of amounts encumbered in Camrose Public to monthly computer reports which include amounts encumbered and variance from budget in each of Calgary Public and Calgary Separate.

The procedures employed at the school level (Problem 7.2) are indicated in Table 98 for each of the processes of transfer, carrying, purchasing, and control. A variety of practices were apparent in each instance. These generally reflect the constraints established by central office personnel on this aspect of the budgeting process.

Procedures in Calgary Separate were of special interest since this system was selected for its relatively high degree of decentralization in the administration phase of the budget process. The distinction between controllable expense (high discretion to transfer) and non-controllable expense (transfers permitted only with central office approval) formed the basis of the practice, with schools permitted to

Table 98

Procedures for Administration of Decentralized Budgets in 1977

Task	Bow Corridor	Camrose Public	Foothills S. Division	County of Strathcona	Calgary Separate	Calgary Public	Edmonton Public
Transfer	No constraints	Variance of 15%	No constraints	With central office approval	No constraints in controllable part of budget. Constraints in non-controllable part	Up to $1000 except for furniture and equipment which require Area Superintendent's approval	Non-staff only. In general, variance of 15% between objects, 25% between programs
Carrying a Surplus or a Deficit	Not certain at time of study	Surplus: Yes Deficit: Not permitted	Surplus or deficit carried	No carrying	Surplus: 25% Deficit: All	Surplus: 20% of budget Deficit: All	Surplus and deficit carried except for staff items
Purchasing[a]	Requisition	Requisition	Combined requisition-purchase order	Requisition	El-Jr.H:Requisition Sr.H: Purchase order	1. Requisition 2. Self-pay purchase order to limit of $25 (El & Jr.H) $150 (Sr.H. 3. Equipment exchange	Same procedures as other schools in system: requisition and purchase orders
Control --Central Office	1. Processing of requisitions 2. Monitoring of records	1. Processing of requisitions 2. PAB control cards at central office	1. Processing of requisitions 2. Monitoring of statements	1. Processing of requisitions 2. Monitoring of records	1. Monitoring of records	1. Monitoring of records	1. No procedures established at central office at time of survey
--School	1. Books at schools	1. Some schools keep books	1. Few schools keep books	1. Schools maintain books	1. Books at senior high level	1. Most schools keep books	1. Schools maintain books
Reporting	Computer Monthly with encumbrances	Three statements annually without listing encumbrances	Monthly statements without listing encumbrances	Computer--frequency and nature varying in 1976 and 1977	Computer Monthly with encumbrances listed	Computer Monthly with encumbrances listed	Regular system of reports not established at time of study

[a] All systems have provision for petty cash expenditures.

exchange teachers and teachers' aides under the provisions of the latter, providing evidence of a formal school staff vote of authorization accompanied the request.

Discussion. It is evident that the practice described above is consistent with the definition of decentralization adopted for this study and with the conceptualization of administrative decentralization (Altshuler, 1970) and decentralized school budgeting (Seward, 1975). It is, nonetheless, a highly controlled pattern for each of the seven systems considered in this study. The use of the phrase "[decentralization of] budget preparation . . . subject to review" rather than "delegation of authority" in the Edmonton Public pilot (see Parry, 1976:5 cited in Chapter 12) illustrated this point.

Differences were apparent among the systems with respect to the extent to which schools actually prepared a budget in the contemporary sense of the term, that is (Osview, Castetter and Koenig, 1967:209):

> . . . a specific plan for implementing organizational objectives, policies, and programs for a given period of time. It embodies (1) descriptions of organizational activities and services requisite to attainment of organizational goals; (2) estimates of expenditures and their allocations; and (3) forecasts of fiscal resources available to support the plan.

The analysis for Problem 7.2 illustrated the diversity, ranging from the Edmonton Public pilot, which embodied these three elements, to Foothills, where there was generally minimal evidence of budget planning at the school level, and Calgary Separate, where schools were not required to prepare a budget. These contrasts also reflected varying degrees of "program" budgeting at the school level, as opposed to "traditional" budgeting. Further, all systems followed an "incremental" mode in that allocations to schools were based on previous patterns. No instance of a "zero-base" approach was evident for a system or a school.

It is apparent from the analysis that, unlike the practice in California reviewed in Chapter 3, there are no clearly identifiable "models" of decentralized school budgeting among the systems except for: (1) a reliance on per pupil allocations in Camrose Public, Foothills, Strathcona, and Calgary Public, (2) the use of previous patterns of expenditure as a base in each school in Bow Corridor and Edmonton Public, and (3) a highly centralized preparation phase in Calgary Separate involving a scale of issue following by a highly decentralized administration phase.

Operational Problems (Problem 8)

The generalizing analysis contained in this section concerns operational problems which have been encountered. It is delimited to experience in the five systems where the process of organizational change has reached at least the stabilization phase. Bow Corridor and the Edmonton Public pilot are therefore excluded from the analysis.

Operational problems encountered by central office personnel (Problem 8.1). Table 99 summarizes the problems reported for trustees (considered as central office personnel for purposes of this analysis), superintendents, and other central office personnel. Most occurred in the administration phase of the budget process.

A comparison with those identified in the adoption stage reveals three major points of difference. Firstly, no instance was cited of

Table 99

Operational Problems Encountered by Central Office Personnel in Five Systems[a]

Persons	Phase	Category	Description of Problem	System in which Problem Reported[b]
Trustees	Preparation	Allocations	1. The amount and purpose of the Scale of Issue	CS
	Administration	Carrying	1. The relatively large surplus in the total of decentralized accounts	CP
	General	General	1. The amount and purpose of School Generated Funds	CS
		Role	1. Unfamiliarity with role of supervisors	CP
Superintendents	Preparation	Allocations	1. Inadequate allocations to senior high and growing schools 2. Principals overlooking areas of need	F F
	Administration	Purchasing	1. Deficits accumulated in some school budgets 2. PAB classification and coding	C C
		Accounting	1. Incorrect billing to centralized accounts by schools	F
	General	General	1. Responding to concerns of trustees (see above)	CS
Other central office --non-instructional[c]	Preparation	Allocations	1. Lack of planning at school level 2. Principals' perception that allocations are inadequate	CS S
	Administration	Transfer	1. School requests which violate guidelines	S

[a] Excluding Bow Corridor and Edmonton Public

[b] C = Camrose Public; F = Foothills; S = County of Strathcona; CS = Calgary Separate; CP = Calgary Public

[c] Responses of Assistant Superintendent Business Administration in County of Strathcona (a certificated teacher) are included here.

Table 99 (continued)

Persons	Phase	Category	Description of Problem	System in which Problem Reported[b]
Other central office --non-instructional[c] (continued)	Administration	Purchasing	1. Deficits accumulated in some school budgets	CS
			2. PAB classification and coding	CP, S
			3. Incorrect procedures by schools	CP
		Accounting	1. Incorrect billing to centralized accounts by schools	F
		Reporting	1. Establishing procedures for reporting to schools	S
	General	General	1. Concern at principals' perceptions of problems	CP
Other central office --instructional	Preparation	Role	1. Workload in consulting with principals	CS
	Administration	Allocations	1. Principals attendance at Miami convention	CS
			2. Reallocations involving teachers' aides	CS
			3. Effect of inflation on per pupil allocations	CP
			4. Budget decisions by schools perceived to be inappropriate	CP
		Role	1. Concern by area superintendents with clerical tasks	CP
		Purchasing	1. Incorrect procedures by schools	S, CP
			2. Deficits accumulated in some school budgets	CS
			3. PAB classification and coding	CP
	General	General	1. Concern at principals' perceptions of problems	CP

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[a] Excluding Bow Corridor and Edmonton Public

[b] C = Camrose Public; F = Foothills; S = County of Strathcona; CS = Calgary Separate; CP = Calgary Public.

[c] Responses of Assistant Superintendent Business Administration in County of Strathcona (a certificated teacher) are included here.

resistance to decentralization, although role conflict was evident for some area superintendents in Calgary Public, who perceived their tasks associated with the practice involved an excessive amount of clerical work, and in Calgary Separate, where one central office administrator was concerned at the amount of time he spent in discussing budget matters with principals. Secondly, problems of control were more apparent in several systems. Difficulties encountered as a result of incorrect procedures at the school level and the complexity of the PAB system were still felt, though several respondents noted a decline as all personnel became more familiar with the practice. Concerns were expressed, however, with matters such as accumulation of deficits in some schools in Calgary Separate and Camrose Public. The decision by several principals in Calgary Separate to use decentralized funds to attend a convention in Miami was also an item of frequent comment in that system. Thirdly, central office respondents in only one system reported problems in establishing procedures for reporting to schools compared to three systems, other than Bow Corridor, during the implementation phase.

Operational problems encountered by school personnel (Problem 8.2). Table 100 summarizes the operational problems reported for school personnel in the systems under consideration in this section of the analysis. Most problems were associated with the administration phase with similar concerns related to purchasing as reported for the adoption stage of the change process. A comparison with those identified earlier reveals three major points of difference. Firstly, except for the diversity of concerns within Calgary Public, there were fewer reports of problems associated with role. Few respondents, for example, referred

Table 100

Operational Problems Encountered by School Personnel in Five Systems[a]

Persons	Phase	Category	Description of Problem	System in which Problem Reported[b]
Principals	Preparation	Role	1. Lack of understanding of purpose of decentralization	CP
			2. Lack of understanding of financial matters	CP
			3. Excessive amount of time required	CP, S
			4. Excessive amount of detail required in equipment budgets	CP
			5. Decentralization of items best centralized	CP
		Allocations	1. Inadequate allocations	F, S, CS, CP
			2. Inadequate guidelines	CP
			3. Loss of school generated funds	F
			4. Failing to allocate in areas of need	F
			5. Delays in advising allocations	CS
	Administration	Role	1. Lack of understanding of purpose of decentralization	CP
			2. Lack of understanding of financial matters	CP, F
			3. Constraints established by Accounting Department which are perceived to be inappropriate	CP
			4. Excessive amount of time required	CP, CS
		Transfers	1. Requests rejected by central office personnel	S
		Purchasing	1. Early cut-off dates	CP
			2. PAB coding and classification	CP, C
			3. Delays	CP, S, CS
			4. Incorrect procedures used by schools	CP
			5. Mix-ups	S, CS

[a] Excluding Bow Corridor and Edmonton Public

[b] C = Camrose Public; F = Foothills, S = County of Strathcona; CS = Calgary Separate; CP = Calgary Public

Table 100 (continued)

Persons	Phase	Category	Description of Problem	System in which Problem Reported[b]
Principals (continued)	Administration (continued)	Accounting	1. Errors in billing	CP, CS
			2. Difficulties with procedure	C
			3. Difference between actual and estimated expenditures	S
		Reporting	1. Adequacy and/or frequency	C, F, S, CS, CP
Teachers	General	Role	1. General lack of understanding of process	CP
			2. Need to orient new members of staff	CP, CS, C
		Allocation	1. Requests by teachers which could not be met	F, S, CS
			2. Insufficient time for budgeting	CP
	Preparation	Role	1. Lack of involvement of some teachers	CP
	Administration	Purchasing	1. Difficulty with purchasing procedures	CP
Secretaries	Administration	Role	1. Amount of time required	C, CP
		General	1. Same problems as reported for principals	S (implied in all)

[a] Excluding Bow Corridor and Edmonton Public

[b] C = Camrose Public; F = Foothills; S = County of Strathcona; CS = Calgary Separate; CP = Calgary Public

to a lack of skill and experience among principals. Secondly, inadequate per pupil allocations were reported in four systems compared to two in the earlier stage. This problem was illustrated by the changes in allocations in: (1) the County of Strathcona, where the amounts were $25 per pupil at each level in 1977 compared to $25, $27.50, and $28.25 in 1975 for elementary, junior high and senior high levels, respectively, and (2) Foothills, where the 1977 amounts varied from $26.50 to $32 per pupil for different sizes of schools, with an additional $5 for each senior high pupil, compared to a general $25 per pupil in 1970. One area superintendent in Calgary Public perceived a difficulty in keeping pace with inflation in that system and suggested that there had been a general "downward pressure" on the amount of the per pupil allocations. Thirdly, problems with the adequacy and frequency of reporting were mentioned in all five systems compared to one during the adoption phase.

Few principals identified operational problems encountered by teachers. Those identified in three systems concerned the need to orient new members of staff to the practice and the difficulty of meeting all budget requests made by teachers. Difficulties encountered by secretaries were generally related to the problems in the administration phase reported above.

An important feature of Table 100 is the relatively large number of operational problems reported by school personnel in Calgary Public, many of whom perceived that the constraints established in the budgeting process by the Division of Support Services were unnecessarily restrictive and resulted in a heavy workload. Several respondents associated these difficulties with the PAB system. Central office respondents recognized the concern of principals in this respect but felt that many were not aware of the purposes of decentralized budgeting. These problems were reported in a management study which concluded (Calgary Board of Education, 1977a:6) that "the concept of 'controlled' decentralization has not been effective."

Discussion. The problems identified in this section of the chapter are generally consistent with several suggested in the literature as dysfunctions in budgeting systems. These were discussed earlier in relation to problems of implementation and generally concerned role conflict, communication, and technical difficulties. An additional problem which was more apparent in the later stage was that associated with the implementation of an adequate system of controls. Dessler (1976:112) identified this as a major problem of decentralization and noted that these are time-consuming and difficult to implement, with frequently adverse effects on employee attitudes. These effects were apparent in Calgary Public, along with other dysfunctions identified by Weston and Brigham (1975:102-104) concerned with the cumbersome nature of many detailed budget programs and the replacement of organizational goals by budgetary goals.

Disagreements in Decentralized Budgeting (Problem 9)

This section summarizes the perceptions of central office administrators and principals with respect to the effects of decentralized school budgeting on the frequency and severity of disagreements related to school budgeting in each system other than Edmonton Public. Perceptions were not sought in those instances where respondents were appointed following the implementation of decentralized school budgeting or in other circumstances where a judgment was not possible. Perceptions were not gathered from central office administrators in Bow Corridor, Camrose Public, Foothills, County of Strathcona, or area superintendents in Calgary Public, and from principals in Foothills. A summary of the responses in the other systems is set out below.

1. Principals in Bow Corridor considered that the practice had no effect on the frequency and severity of disagreements among system personnel.

2. Principals in Camrose Public and the County of Strathcona generally considered that the practice either had no effect or had resulted in a reduction of the frequency and severity of disagreements.

3. Central office administrators in Calgary Separate considered that the practice had no effect on the frequency and severity of disagreements among central office personnel and that disagreements with principals were either the same or less with respect to both frequency and severity. Principals in this system considered that decentralization resulted in disagreements with instructional personnel at central office which were either less frequent or severe or had no effect at all. Two of the six perceived that disagreements were more frequent with personnel in Business Affairs and with principals while one of the six considered they were more severe in each instance.

4. The Superintendent of Instruction in Calgary Public considered that disagreements between persons in his division and those in the Division of Support Services and principals were more frequent and more severe in each instance. Principals were equally divided between "less"

and "more" in judging the effect of the practice on the frequency and severity of disagreements with the Division of Instruction while four of the six considered that disagreements with the Division of Support Services had increased in frequency and severity. Principals considered disagreements with teachers occurred with greater or the same frequency while responses were equally divided with respect to severity.

5. Those indicating that disagreements were more frequent or severe usually referred to "the greater opportunity for disagreement" while those reporting less frequent and severe disagreements often referred to budget matters being "out in the open now."

6. Disagreements between superintendents or instructional personnel at central office and principals generally concerned the amount of allocations and differing priorities in the preparation phase while those between non-instructional personnel at central office and principals generally concerned processes in the administration phase. Some principals preferred to use the term "questions," "enquiries," or "requests for information" rather than "disagreements" in discussing relationships with central office. Disagreements between principals and teachers generally concerned differing priorities in the preparation phase and the general availability of funds.

Discussion. Corwin (1970) studied teacher participation in decision-making in Ohio and tested the hypothesis that "organizational tension and conflict are positively associated with the extent to which subordinates participate in the authority system." For _routine_ decision-making, the extent of participation was found to be positively related to the number of disputes but inversely related to the number of major disputes. Few statistically significant correlations were found for policy decision-making. Corwin (1970:264) suggested that:

> . . . the authority to make routine decisions offers more opportunity to express existing disagreements and provides occasions for disputes to arise, but . . . the decision-making process could prevent major aggravations from accumulating and developing into major incidents.

The data gathered in this study afforded little opportunity to examine the effect of decentralization on the frequency and severity of disagreements. Except for Calgary Public and, to a lesser extent, Calgary Separate, decentralization was generally perceived to result in disagreements between principals and teachers which were either the "same" or "less" in frequency and severity. Only the Calgary Public data are consistent with the Corwin analysis. The increased frequency and severity of disagreements between central office personnel and principals reported by some respondents in Calgary Public was attributed, in some instances, to an "increased opportunity for disagreement" but the context was not analagous to the Corwin situation.

The conceptualization of conflict by Schmidt and Kochan (1972) may be a suitable framework for an investigation of conflict in budgeting. They suggested (Schmidt and Kochan, 1972:365) that "potential for conflict [between organizational units] depends on the extent to which resources are shared, the degree of interdependence, and perceived incompatibility of goals." The amount of per pupil allocations, the degree of interdependence associated with the outcomes of budget decisions, the extent to which central office controls are perceived to be appropriate, and the extent to which instructional goals and priorities are perceived to be compatible are factors identified in this study as being associated with disagreements and which are indicators of the factors discussed by Schmidt and Kochan. On the other hand, however, Schmidt and Kochan considered conflict to occur when interference with another unit's activities takes place--an event which was not explored in this study.

Attainment of Objectives (Problem 10)

Respondents were asked to indicate their perceptions of the progress which had been made toward the attainment of the objectives included in the interview schedule. The extent to which these objectives were valued is discussed earlier in this chapter. No data were collected for the Edmonton Public pilot for this item. Table 101 summarizes the perceptions in each of the other six systems. The generalizing analysis below considers the patterns of responses for each of the broad categories of objectives.

Subsidiarity. Providing the principal with an appropriate role in the decision-making process for the allocation of funds was the only objective for which a high degree of progress was generally reported by each group of respondents in all systems. A relatively low degree of progress was reported by both groups, however, for teacher involvement in each of the Bow Corridor, Strathcona, and Calgary Separate systems.

It is apparent that the desire to bring decision-making as close as possible to where decisions are to be effected is perceived to be central to the purpose of decentralized school budgeting. Similar purposes were described in California by Seward (1975) who reported a study which referred to the strong interest among senior administrators in participative decision-making. The responses to this section of the

Table 101

Perceptions of Central Office Administrators and Principals[a] in Six Systems[b] on Progress in Attainment of Objectives of Decentralized School Budgeting

Objective		Evaluation by Central Office Administrators and Principals[c]											
		Bow Corridor		Camrose Public		Foothills		Strathcona		Calgary Separate		Calgary Public	
Category	Description	COA	P	COA	P	COA	P	COA	P	COA	P	COA	P
Subsidiarity	To provide the principal with an appropriate role in the decision-making process for the allocation of funds	H	H	H	H	H	H	H	H	H	H	H	H
Subsidiarity	To provide teachers with an appropriate role in the decision-making process for the allocation of funds	d	L	H	H	H	H	L	N	L	L	H	H
Equity	To provide a more equitable allocation of funds among schools	N	L	H	H	H	H	H	H	N	N	H	H
Efficiency	To obtain more efficient use of funds allocated to each school	L	L	L	H	H	H	L	H	L	H	H	H
Flexibility	To provide schools with greater flexibility in the development of the instructional program	H	L	H	H	H	H	L	N	N	H	H	H
Innovation	To encourage school and teacher innovativeness	N	H	L	N	H	L	L	N	N	N	H	H
Adaptability	To reduce the time required to meet changing school needs	H	L	H	L	L	H	N	N	L	L	L	H
Accountability	To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved	H	L	L	L	N	H	H	L	L	L	L	H

[a] COA: Central Office Administrators; P: Principal.

[b] Outcomes were not evaluated for the Edmonton Public pilot.

[c] H: Progress perceived by a majority of respondents to be "much" or "great" on a generally highly valued objective.
L: Progress perceived by a majority of respondents to be "none," "little," or "some" on a generally highly valued objective.
N: This objective not generally highly valued by respondents (see Table 93). Progress was also generally perceived to be low.

[d] Superintendent declined to evaluate progress on this objective.

interview schedule suggested that respondents were sensitive to the exclusion of some teachers from this process in three systems.

Equity. A high degree of progress was generally perceived by both groups in four systems for the objective of providing a more equitable allocation of funds among schools. Both groups in Bow Corridor and Calgary Separate perceived a low degree of progress with most respondents considering that this had relatively low value as an objective for the practice.

In his comparative study in California Seward (1975) rejected the hypothesis that resources will be allocated more equitably in a decentralized school system. The responses in this Alberta study, together with the elaborative remarks of several respondents, also suggested that the achievement of equity may not be an inherent feature of decentralized school budgeting though it may be a vehicle for implementation. The association between the two may exist because standardized per pupil allocations provided the basis for the practice in five of the six systems and, in several instances, appeared for the first time with decentralization.

Efficiency. Obtaining more efficient use of funds allocated to each school was the only objective, apart from that related to subsidiarity for principals, which was generally highly valued by respondents. Central office administrators in four of the six systems generally considered, however, that progress toward attaining the objective was relatively low. Principals in only one system made a similar evaluation, indicating an important difference between the groups with respect to this item. Only in Foothills and Calgary Public did both groups generally perceive a high degree of progress.

The analysis suggests that the issue of efficiency is one which may be sensitive to different perceptions among system personnel.

Flexibility. A high degree of progress was generally perceived by both groups in Camrose Public, Foothills, and Calgary Public for the objective of providing schools with greater flexibility in the development of the instructional program. Central office administrators and principals differed in their perceptions in Bow Corridor and Calgary Separate.

Seward (1975) found support in his California study for the hypothesis that expenditure diversity in school accounts would be greater in a decentralized district. Robinson and Erickson (1971:11) suggested that instructional flexibility may be enhanced by delegation of authority to the school level. The above analysis indicates varying degrees of achievement of these expectations. Remarks by respondents in several systems suggest that progress is dependent on factors which include the amount of lump-sum allocations to schools, the constraints established by central office, and the number and nature of the budget categories for which schools have discretion to allocate and/or reallocate.

Innovation. The analysis of objectives earlier in this chapter referred to the relatively low value placed by many respondents on the objective of encouraging school and teacher innovativeness. A high degree of progress was perceived among only four groups of the twelve considered in Table 101. Differences were found between the perceptions of central office administrators and principals in each of Bow Corridor and Foothills. Only in Calgary Public did both groups generally perceive a high degree of progress.

The responses suggest that high expectations should not be held for the achievement of innovation through decentralized school budgeting.

Adaptability. The reduction of time required to meet changing school needs was a generally highly valued objective of decentralized school budgeting. Only four of the twelve groups perceived a high degree of progress. Differences between central office administrators and principals exist for four of the six systems while in the other two systems, a relatively low degree of progress was generally perceived (both groups considered the objective to have low value in one of these systems).

The comments of many respondents suggested that the achievement of this objective is constrained by delays encountered in the purchasing process during the administration phase. In most instances, the procedures for purchasing were no different to what they would be under a centralized system of budgeting; that is, the submission of a requisition or purchase order by the principal, with processing by central office personnel.

Accountability. Greenfield (1972:22) suggested that a school system is accountable "when it defines clear objectives and makes known how effective it has been in achieving them." He suggested that involvement of school personnel in decision-making, including budgeting (Greenfield, et al., 1969), is a requirement for an effective program of accountability, while Zimet (1973:120) asserted that "the notion of accountability lies at the very heart of decentralization."

The interview schedule included an objective derived from the Greenfield conceptualization of accountability; namely, "to encourage and facilitate examination of the relationship between program objectives, program outcomes, and the costs involved." The analysis earlier in the chapter indicated that the objective was generally highly valued by all respondents. Only four of the twelve groups perceived a high degree of progress in attaining the objective. Differences between central office administrators and principals exist for four of those six systems, while in the other two systems, both groups of respondents perceived a low degree of progress.

The comments of several respondents suggest that the achievement of this objective may be constrained by factors such as the lack of a "planning model" in school budgeting, inadequate controls, and the difficulty in developing adequate methods of reporting to schools.

Summary. This section of the analysis has served to identify differences between central office administrators and principals with respect to their perceptions of the attainment of the objectives of decentralized school budgeting. Only for the objective related to the involvement of principals was there a relatively high degree of progress seen by respondents. Different groups in different systems perceived a relatively low degree of progress for the other objectives, especially for those relating to efficiency, innovation, adaptability, and accountability. Factors which suggested reasons for these outcomes were identified.

Preferences for Change (Problem 11)

Table 102 summarizes the preferences for change expressed by central office administrators and principals in the six systems other than Edmonton Public.

1. Only three of the 159 responses in the table reflect a preference for a lower degree of decentralization.

2. The majority of respondents in both groups in four of the six systems preferred no change in School Budget Authority. The superintendents in Camrose Public and Foothills preferred more school authority while the majority of principals preferred no change. Those preferring more authority invariably referred to staffing as a category which should be decentralized.

3. The majority of respondents in both groups in four of the six systems preferred no change in Operational Flexibility. Half of the central office administrators and a majority of principals interviewed in Calgary Public described a need for a relaxation of central office controls on transferability, as did a majority of principals in Camrose Public.

4. A majority of principals interviewed in the County of Strathcona preferred that schools should carry forward a surplus or a deficit. This system was the only one in the second stage of the study without such a provision.

A variety of other recommendations for change were made by one or more respondents in each system. These generally indicated a desire to overcome the problems identified earlier in this chapter. The preferred extent of decentralization in five years time included these

Table 102

Preferences for Change in Decentralized School Budgeting in Six Systems[a]

System	Group	School Budget Authority			Operational Flexibility			Carrying a Surplus or a Deficit		
		More	Same	Less	More	Same	Less	More	Same	Less
Bow Corridor	Central office	0	1	0	0	0	1	0	1	0
	Principals	0	5	0	0	5	0	0	5	0
Camrose Public	Central office	1	0	0	0	1	0	0	1	0
	Principals	1	4	0	3	2	0	0	5	0
Foothills	Central office	1	0	0	0	1	0	0	1	0
	Principals	1	5	0	0	6	0	0	5	1
Strathcona	Central office	2	1	0	0	4	0	0	4	0
	Principals	2	4	0	2	4	0	4	2	0
Calgary Separate	Central office	0	4	0	0	3	1	0	4	0
	Principals	0	6	0	2	4	0	1	5	0
Calgary Public	Central office[b]	2	4	0	3	3	0	0	6	0
	Principals	1	7	0	5	3	0	3	5	0

[a] Preferences were not sought in Edmonton Public pilot.

[b] The preferences of the Superintendent of Instruction and administrators in area offices are combined.

changes as well as the changes in authority, flexibility, and carrying described above.

Satisfaction with Decentralized School Budgeting (Problem 12)

Table 103 summarizes the responses of central office administrators and principals in the six systems other than Edmonton Public with respect to the extent of their satisfaction with current decentralized school budgeting practice.

All but one of the fifty-three respondents selected either "slightly satisfied," "moderately satisfied," or "highly satisfied" with the majority for both groups in each system selecting "moderately satisfied." The Superintendent of Bow Corridor indicated that he was "moderately dissatisfied." He qualified his response by indicating that he was moderately satisfied with the value of decentralized school budgeting, but that his dissatisfaction arose from the need he saw for a greater degree of control and improved communication.

With the exception of Bow Corridor, the responses suggest that there are no important differences between the levels of satisfaction of central office administrators and principals in the six systems.

Many respondents qualified their responses to this item by referring to the problems summarized earlier in this chapter. This was especially apparent in Calgary Public, where school personnel reported many problems, despite their perception of a high degree of progress in attaining each of the objectives listed in the schedule.

Table 103

Extent of Satisfaction with Decentralized School Budgeting in Six Systems[a]

System	Respondents	Degree of Satisfaction[b]						
		HS	MS	SS	SD	MD	HD	N
Bow Corridor	Central office	0	0	0	0	1	0	0
	Principals	3	2	0	0	0	0	0
Camrose Public	Central office	0	1	0	0	0	0	0
	Principals	2	3	0	0	0	0	0
Foothills	Central office	0	1	0	0	0	0	0
	Principals	2	4	0	0	0	0	0
Strathcona	Central office	1	2	1	0	0	0	0
	Principals	1	4	1	0	0	0	0
Calgary Separate	Central office	2	2	0	0	0	0	0
	Principals	2	4	0	0	0	0	0
Calgary Public	Central office	0	6	1	0	0	0	0
	Principals	1	6	0	0	0	0	0

[a] Excluding Edmonton Public.

[b] HS = Highly satisfied; MS = Moderately satisfied; SS = Slightly satisfied; SD = Slightly dissatisfied; MD = Moderately dissatisfied; HD = Highly dissatisfied; N = Neutral.

SUMMARY

This chapter provided a comparative review of the findings reported in Chapters 6 to 12 related to the objectives, implementation, operation, and perceived outcomes of decentralized school budgeting in seven school systems selected on the basis of data gathered in the first stage of the study. This generalizing analysis was presented against the theoretical background contained in Chapter 2 and the review of literature in Chapter 3. The major findings and conclusions are contained in Chapter 14 along with a statement of the implications of the study for the development of theory and the practice of educational administration.

Chapter 14

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The review of the study contained in this chapter is organized in four sections. The first provides an outline of the study in terms of its purpose, conceptual framework, methodology and instrumentation. The second section contains a summary of the major findings and conclusions in each of the two stages of the study. The third section outlines the implications of the study for the development of theory and for the practice of educational administration. The chapter concludes with recommendations concerning the implementation and operation of decentralized school budgeting systems and provides suggestions for further research.

OUTLINE OF THE STUDY

Purpose of the Study

The purpose of the study was to investigate the nature, objectives, adoption, operation, and perceived outcomes of decentralized school budgeting in Alberta.

Statement of the problem. The problem for research was stated in twelve parts as follows:

1. How do school systems vary in the extent to which budget decisions have been decentralized to the school level?

2. How does the political-legal framework in Alberta constrain the implementation of decentralized school budgeting?

3. What forces have influenced the introduction and development of decentralized school budgeting?

4. What are the objectives of decentralized school budgeting?

5. What change strategies have been adopted by school systems to implement decentralized school budgeting?

6. What problems have been encountered by school systems in implementing decentralized school budgeting?

7. What procedures are followed to prepare and administer school budgets in school systems which have implemented decentralized school budgeting?

8. What operational problems have been encountered in school systems which have implemented decentralized school budgeting?

9. How do central office administrators and principals perceive the effects of decentralized school budgeting on the frequency and severity of disagreements related to school budgeting?

10. What differences occur between the perceptions of central office administrators and principals in respect to the extent to which the objectives of decentralized school budgeting have been attained?

11. What changes to current decentralized school budgeting practice are preferred by central office administrators and principals?

12. What differences occur between central office administrators and principals in respect to the extent of their satisfaction with current decentralized school budgeting practice?

Various sub-problems were developed for parts 1 to 8 of the problem statement. These served as guides to the development of instruments and the analysis of data.

Conceptual Framework

A framework for the study was derived from the concepts of decentralization, organizational change, and budgeting (Chapter 2), and from a review of literature related generally to decentralization within local school systems and the limited amount of material available which focused on decentralized school budgeting (Chapter 3).

Decentralized school budgeting was conceptualized as a form of administrative decentralization and defined as the systematic and consistent delegation from central office to the school of authority to make budget decisions. The existence of a centralization-decentralization "continuum" with respect to the distribution of authority was acknowledged.

A school budget was defined as a fiscal plan for implementing school objectives, policies, and programs for a fiscal year. The tasks of budgeting were considered to be: (1) the preparation of the budget, (2) the adoption of the budget, and (3) the administration of the budget. The legal responsibility of elected trustees to adopt a system budget was recognized in the framework. The delegation of authority in decentralized school budgeting was therefore considered to apply to the preparation and/or administration of school budgets subject to the constraints of a system budget. The tasks of purchasing and accounting were included in the tasks of administering the budget.

Elements in the conceptual framework were derived from the theory of organizational change since the latter is concerned with changes in the structures (decentralization) and processes (delegation) of an organization. The model of organizational change developed by Mann and Neff (1961) was included in the framework to serve as a guide in the preparation of instruments and the analysis of data related to the change process. The five stages included in this model were: (1) the steady state of the organization before change, (2) the recognition of a need for change, (3) planning the change, (4) taking the action steps to make the change, and (5) stabilizing the change.

The framework for the consideration of external factors which influenced the introduction of decentralized school budgeting was the classification of environmental conditions by Hall (1972) as technological, legal, political, economic, demographic, ecological, and cultural. The political model of change proposed by Baldridge (1971 and 1974) provided the basis of the classification of internal factors according to the individuals or groups articulating an interest or concern.

Methodology and Instrumentation

The study responded to a need for a broad, exploratory investigation of recent trends in decentralized budgeting in a Canadian context. This need was reflected in the research design which consisted of two distinct stages. The first stage involved a descriptive survey to determine the nature and extent of current practice in Alberta (Problems 1 and 2). A case study approach was adopted in the second stage to investigate the objectives, adoption, operation and perceived outcomes of decentralized school budgeting (Problems 3-12).

First stage--a descriptive study. Three methods were used to collect information in the first stage of the study. The first method, for Problem 1, involved the preparation and validation of a questionnaire which was mailed to the superintendent of each school system in Alberta. The conceptual framework guided the construction of the questionnaire in the following ways:

1. The conceptualization of the budgeting process suggested that decisions related to budgeting may be delegated during the preparation phase, the administration phase, or in both phases. Separate sections of the questionnaire sought information concerning the distribution of authority between central office and the school in each of the preparation and administration phases, thus establishing a School Budget Authority Scale and an Operational Flexibility Scale, respectively. The budget items in these scales were derived from the Program Accounting and Budgeting classification used in Alberta school systems.

2. The response alternatives for the two scales were derived from the definition of decentralized school budgeting adopted for the study.

Other sections of the questionnaire sought demographic information, details of the extent to which system policy provided for a school to carry an operating surplus or deficit to the following budget year, and information concerning the year of implementation and the existence of explicit policies related to the practice.

The relatively high response rate of ninety-five percent permitted the use of descriptive statistics in the analysis of data. Central to this analysis was an operational definition of the degree of decentralized school budgeting derived from the assumption of a centralization-decentralization continuum and a procedures described by Seward (1975). The degree of decentralized school budgeting was determined by calculating the total number of budget items (School Budget Authority Scale) or budget transfers (Operational Flexibility Scale) for which decisions had been delegated to the school level.

The second method, for Problem 2, involved the examination of documents to determine the nature of the political-legal factors which serve to constrain the implementation of decentralized school budgeting in Alberta. Provincial statutes and regulations were examined along with policy statements of The Alberta Teachers' Association and Alberta School Trustees' Association. This analysis of documents was supplemented by interviews with spokespersons for the Department of Education, The Alberta Teachers' Association, and the Alberta School Trustees' Association. These interviews constituted the third method of collecting data in the first stage of the study.

Second stage--seven case studies. Seven school systems were selected using data gathered in the first stage of the study. Each had a relatively high degree of decentralization, operationally defined as scoring at the seventy-fifth percentile or higher on either or both of the School Budget Authority Scale and the Operational Flexibility Scale. The systems were also chosen to reflect differences in size, type of jurisdiction, and number of years experience with the practice.

The broad, exploratory nature of the study suggested a central role for the interview as a method for gathering data in the second stage. This approach limited the number of persons providing information.

Central office personnel interviewed were those influential in the decision to decentralize and those with major responsibilities in the budgeting process. Several procedures were employed in the various systems to select a group of principals who were representative of the different levels of schooling and had at least one year of experience with decentralized school budgeting.

Interview schedules with a varying degree of structure were prepared and pilot-tested. The conceptual framework and sub-problems facilitated the formulation of questions.

Eighty persons were interviewed, of whom thirty-six were central office personnel and forty-five were principals. Tape recordings of the interviews were transcribed and reduced to a standard form by content analysis. Documents identified during interviews as relevant to the study were also examined.

SUMMARY AND CONCLUSIONS

The findings of the first stage of the study are contained in Chapter 5. Chapters 6 to 12 constitute case studies of decentralized school budgeting in the seven systems selected for investigation in the second stage, with Chapter 13 devoted to a comparative review and generalizing analysis of these seven cases. The summary and conclusions set out below are largely derived from the findings reported in Chapters 5 and 13.

Stage 1: Political-Legal Constraints

How does the political-legal framework in Alberta constrain the implementation of decentralized school budgeting?

The first stage of the study identified the political and legal factors which constrained the extent to which budget decisions can be decentralized from central office to the school level. These are summarized below.

Provincial statutes and regulations. A review of statutes and regulations related to public education in Alberta revealed the following constraints:

1. The responsibility for the administration of schools in a system resides with the school board, indicating that decisions made at the school level are subject to the review of the board.
2. The requirements for conditional grants and annual financial reports by school boards to the Minister of Education imply that boards must establish controls for budget decisions made at the school level.
3. The requirements of *The Alberta Labour Act* and *The School Act* constrain the delegation of budget decisions which relate to the salaries of teachers and other employees whose salaries are determined by collective agreements.
4. The curriculum provisions of *The School Act* serve as a constraint on the extent to which schools may make budget decisions related to programs and materials. Courses of study must be approved by the Minister while instructional materials must be approved by a school board under the terms of a Ministerial delegation of authority.

5. Decisions related to the purchase, construction, alteration, addition and renovations to buildings must conform to regulations under *The School Buildings Act*.

6. The ultimate constraint on the amount of money included in decentralized school budgets is established by limits placed on school system funding through the provincial School Foundation Program Fund and regulations which restrict the extent to which boards may raise additional money at the municipal level.

Alberta School Trustees' Association. The ASTA had no policy which directly or indirectly served as a constraint on decentralized school budgeting.

The Alberta Teachers' Association. The policy of the ATA explicitly promoted the concept of decentralization but included statements which served as constraints on budget decisions which result in the exchange of teachers for teachers' aides. Policy required that teachers shall determine the number, type, and function of teachers' aides in a school and that employment of aides may not result in a reduction in the number of certificated staff. A spokesman for the Association indicated that no concerns with respect to decentralized school budgeting had been expressed at the provincial level but that the Edmonton Public School Local of the Association was monitoring a pilot program in school-based budgeting in the Edmonton Public system.

Collective agreements. The spokesman for the ATA indicated that decentralized school budgeting and its consequences had not been an issue in collective bargaining and could recall no collective agreement which limited the extent to which authority to make budget decisions may be delegated to the school.

Conclusions. The constraints in the political-legal framework are largely a consequence of the subordinate position of school boards in the organization of education in Alberta. Statutory and regulatory requirements related to the administration of schools generally, the School Foundation Program Fund, conditional grants, financial reports, payment of salaries, curriculum and building, all require that boards must constrain budget decisions made at the school level. The conclusion suggested by the analysis is that decentralized school budgeting in Alberta must be a relatively highly controlled form of the practice.

The constraints in ATA policy have not been an issue in the context of decentralized school budgeting except for the monitoring of practice in Edmonton Public at the time of the study. This policy thus exists as a potential constraint on the decentralization of budget decisions which relate to staff.

Stage 1: A Survey of All School Systems

How do school systems vary in the extent to which budget decisions have been decentralized to the school level?

The first stage of the study also investigated the nature and extent of decentralized school budgeting in the province, with data from questionnaire responses from ninety-five percent of Alberta school systems analyzed to investigate the relationship between the degree of decentralized school budgeting and the type of system, pupil enrolment, number of schools, and dispersion.

School Budget Authority. The School Budget Authority Scale considered the distribution of authority between the central office and school prior to consideration of the system budget by the board. It was found that:

1. School decisions were typically made in each system for only eight of the twenty-seven items in the scale. These items were in the services purchased and supplies categories of the budget.

2. Values of lambda indicated that there is little or no association between the type of system and the type of decision made for each budget item. The value was 0.00 for twenty-one of the twenty-seven items and varied from 0.02 to 0.10 for the other six.

3. A measure of the degree of decentralization was obtained for each school system by calculating the total number of budget items for which a school decision was made. A comparison of means indicated that Counties have the highest degree of decentralization with a mean of 9.5 compared to 8.3, 9.1, and 7.3 for Divisions, Public Districts, and Separate Districts respectively.

Operational Flexibility. The Operational Flexibility Scale considered the distribution of authority between the central office and school following consideration of the system budget by the board. It focused on the extent to which schools have discretion to transfer funds from one category of a budget to another. It was found that:

1. If all systems are considered, at least moderate discretion was typically allowed for nine of the twenty-five types of transfers listed in the Scale, while a high degree of discretion was allowed only for transfers within the supplies category. Apart from transfers within a

given budget category, the moderate discretion applied only to transfers between services purchased and supplies and between supplies and capital outlay.

2. A difference was revealed between types of systems with Separate Districts typically allowing at least moderate discretion for ten transfers compared to seven, six, and five for Public Districts, Divisions, and Counties respectively. Values of lambda indicated, however, that there was little or no association between the type of system and the nature of the discretion to transfer. The value was 0.00 for twenty of the twenty-five types of transfers and varied from 0.01 to 0.16 for the other five types.

3. A measure of the degree of decentralization was obtained for each school system by calculating the total number of transfers for which: (i) at least moderate discretion, and (ii) high discretion, was allowed. A comparison of means indicated that Separate Districts had the highest degree of decentralization in each instance with means of 11.8 and 4.2, compared to 8.4 and 2.5, 8.9 and 1.8, and 8.6 and 3.0 for Divisions, Counties and Public Districts respectively.

Carrying a surplus or a deficit. An analysis of responses concerned with the extent to which schools may carry an operating surplus or deficit revealed that:

1. Except for Counties, the different types of systems do not typically provide for the carrying of a surplus or a deficit.

2. The measures of association given by lambda suggest that there is only a weak relationship between the type of system and the type of policy. The values were 0.11 for carrying a surplus and 0.10 for carrying

a deficit, indicating that knowledge of the type of school system increased the ability to predict the type of policy by eleven percent and ten percent respectively.

School Budget Authority and Operational Flexibility. Values of the Spearman correlation coefficient indicated that there was generally a weak relationship between the measures on the School Budget Authority Scale and the Operational Flexibility Scale. Seven of the ten coefficients lay between -0.20 and +0.20. The other values attained were 0.61 for Counties, 0.33 for Public Districts, and -0.27 for Separate Districts.

Degree of decentralization and policy on carrying. A policy of allowing schools to carry a surplus or a deficit was generally associated with a higher mean score on the various decentralization scales for all types of systems except Divisions.

Decentralization and selected organizational characteristics. Data were analyzed to investigate the relationships between the degree of decentralization and the school system characteristics of pupil enrolment, number of schools, and different measures of dispersion. It was found that:

1. There was a low positive relationship (rho = 0.22) between the number of pupils and measures on the School Budget Authority Scale. A similar relationship was found between the number of schools and measures on the same scale.

2. There was a weak negative relationship (rho = -0.16) between the number of pupils and measures on the Operational Flexibility Scale (High Discretion). The same coefficient was found for the relationship

between the number of schools and measures on this scale.

3. There was little or no association between measures of dispersion and measures of decentralization. Spearman coefficients for the total number of systems in the study lay in the range from -0.12 to 0.08.

Implementation of decentralized school budgeting. It was found that:

1. Approximately eighty percent of Division and County superintendents perceived their systems to have decentralized school budgeting compared to approximately fifty-five percent of superintendents in Public and Separate Districts.

2. Except for Public Districts, the majority of superintendents reported that the practice was implemented before 1973. The majority of systems without decentralized school budgeting had not considered the matter.

3. Thirty superintendents, including fifteen in Counties, furnished statements of policy related to decentralized school budgeting.

4. Identical or similar patterns of school involvement in budgeting were reported by ten of fifteen superintendents administering more than one system. This suggested that the administrative style of the superintendent may be an important factor in the pattern.

Conclusions. The following may be concluded from the summary of findings set out above:

1. Alberta systems are relatively centralized, especially with respect to the categories of certificated staff, non-certificated staff, and capital outlay. Only two systems provided evidence of a policy which systematically and consistently delegated budget decisions

for staff categories to the school level; namely, Edmonton Public for a seven-school pilot project in 1976-77 and Yellowhead School Division in 1977. With the exception of these systems, there were no Alberta counterparts to those California systems which provided the distinctive staff models described in the review of literature in Chapter 3.

2. The relatively high degree of centralization described above generally applies to both the preparation and administration phases of the budgetary processes.

3. The analysis suggests that the variables of type, size, and dispersion of system account for little of the variance among systems on the different decentralization scales. However, the low positive correlations between measures on the School Budget Authority Scale and the number of pupils and number of schools suggest that the different mean scores on this scale among the types of systems may be associated, at least in part, with differences in the numbers of pupils and schools. Similarly, the weak negative relationships between measures on the Operational Flexibility Scale and the same organizational characteristics suggest that the different mean scores among the types of systems on this scale may also be associated with differences in the numbers of pupils and schools. Table 104 illustrates for mean pupil enrolment in the different types of systems. The four major urban boards in Calgary and Edmonton have been deleted from the analysis because their relatively high enrolments grossly distort the mean enrolments in Public and Separate Districts. There was a strong positive relationship (rho = 0.8) between the rank orders of size and school budget authority and a perfect negative correlation (rho = -1.0) between the rank orders of size and operational flexibility.

Table 104

Comparison of Rank Orders for Pupil Enrolment and Measures on Decentralization Scales for Different Types of Systems[a]

Type of System	Pupil Enrolment		School Budget Authority		Operational Flexibility[b]	
	Mean	Rank	Mean	Rank	Mean	Rank
Counties (n=29)	2,965	1	9.5	1	1.8	4
Divisions (n=28)	2,343	2	8.3	3	2.5	3
Public Districts (n=28)	1,559	3	9.0	2	2.9	2
Separate Districts (n=42)	553	4	7.3	4	4.0	1
Spearman correlation coefficient (rho)[c]		1.00		0.80		-1.00

[a] Four major urban systems in Calgary and Edmonton are not included.

[b] High Discretion to transfer.

[c] Correlations between ranks for pupil enrolment and measures of decentralization.

The findings suggest that the variables of type, size, and dispersion of system account for little of the variance among systems on the different scales, but that variations in size may account, at least in part, for variance among the *types* of systems. These interrelationships should be the subject of further investigation in a study which incorporates other system and individual variables.

Stage 2: Seven Case Studies

Seven school systems, each with a relatively high degree of decentralized school budgeting, were selected for investigation in response to parts 3 to 12 of the problem statement. The major findings and conclusions contained in the generalizing analysis of Chapter 13 are summarized below.

Factors influencing adoption. *What forces have influenced the introduction and development of decentralized school budgeting?*

1. The findings gave support to the view of Katz and Kahn (1975:67) that organizational change is a consequence of disequilibrium generated by "changed inputs from the environment including the organizational supersystem, and (2) internal strain or imbalance." "Change inputs" included appointment of new superintendents with an interest in decentralization in four systems, the election of a supportive board in one system, and, generally, the hiring of teachers and administrators interested in participation. The delegation of some curriculum decisions from the provincial to the board level and the associated interest in diversifying school programs, the requirement that systems implement PAB, the "accountability" movement, the development of computer technology, and financial restraints of the provincial government were other factors in this category. "Internal strain or imbalance" was a consequence of rapid growth in pupil enrolment, an external factor, in four systems where central office personnel experienced difficulty in coping with matters related to allocations for schools.

In addition to consistency with the perspective of Katz and Kahn, these findings illustrate other factors identified in organizational theory including "environmental uncertainty" (Lawrence and Lorsch, 1967), "a high degree of complexity" (Price, 1968), "unanalyzable search behaviour" and "many exceptions" (Perrow, 1970). The desire of some principals and teachers to become involved in decision-making supports the view of Miklos (1970, 1974) that this factor promotes decentralization.

2. Superintendents were identified as the major factor in four of the systems. This finding is similar to that reported by Seward (1975) for suburban systems in California and consistent with the view (Owens, 1974:7) that superintendents have a key role in the implementation of change.

Objectives of decentralized school budgeting. *What are the objectives of decentralized school budgeting?*

1. Only two systems had an explicit statement of the objectives of decentralized school budgeting while implied purposes were identified in documents in two other systems. These objectives may be broadly classified as relating to the achievement of: (i) the principle of subsidiarity in placing some budget decisions at the level of which those decisions are to be effected, (ii) equity among schools, (iii) efficiency of resource allocation; (iv) instructional flexibility; (v) innovativeness at the school level; (vi) adaptability, or timely response to school needs, and (vii) accountability at the school level.

2. Objectives related to the principle of subsidiarity, efficiency, flexibility, and accountability were generally highly valued in the seven systems. The objective associated with innovation was not generally valued while differing views were expressed on the value of the achievement of equity through decentralization, with some seeing merit in

standardized per pupil allocation and others preferring equity in terms of "meeting needs."

3. Additional objectives identified in an open response , by one individual in each instance, were (i) to provide trustees with an appropriate role in budgeting, (ii) to facilitate long-range planning, and (ii) to reduce the workload at central office.

4. There were generally no important differences between central office administrators and principals with respect to their perceptions of the objectives. In only two systems did differences occur on more than one objective.

Change strategies. *What change strategies have been adopted by school systems to implement decentralized school budgeting?*

The summary and conclusions below concern change strategies associated with: (i) the events culminating in the decision to adopt the practice, and (ii) securing the involvement of schools.

1. The change strategies or orientations employed prior to the decision to adopt the change generally conformed to a "shared" strategy (Greiner, 1973) or "normative" strategy (Jones, 1969) in that the initiators of change worked with other system personnel to determine the nature of the proposed change. In two instances, however, the superintendents adopted a "unilateral" (Greiner) or "coercive" (Jones) strategy when principals preferred to implement at a slower rate than the superintendent wished (Camrose Public) and when a series of committees failed to recommend a change preferred by the superintendent (Edmonton Public). Elements of the formulation of Chin and Benne (1969), were apparent in the strategies. "Empirical-rational" elements included the

dissemination of information related to the practice, responding to concerns expressed by system personnel, and the selection of new principals. "Power-coercive" elements were evident in Camrose Public and Edmonton Public. In general, however, the strategies employed in each instance were difficult to classify in these standard formulations.

2. The requirement that all schools adopt the practice in the six systems other than Edmonton Public conforms to a "power-coercive" or "unilateral" strategy, although Jones' notion of a "utilitarian" strategy may be applied, since the principalship was conditional on compliance. This requirement indicates that the changes considered in this study are not instances of the diffusion of an innovation. Respondents in the finance departments of Calgary Public and Edmonton Public described the problems which would be encountered in operating two different budgeting systems should principals have the option of participating in a decentralized approach.

3. The periods of time which elapsed before a stabilization phase was attained varied from one to five years, with the Calgary Separate practice evolving in a series of stages over eight years rather than in a single instance of planned change. Only Calgary Public and Edmonton Public have employed pilot projects.

4. The persons providing major assistance to schools were the superintendents in the three smaller systems, the Deputy Superintendent assisted by other central office personnel in the County of Strathcona, different groups of persons from central office in Calgary Separate, committees of central office personnel and principals in Calgary Public, and the System Planner in the Edmonton Public pilot project.

5. In-service activities varied from meetings between the superintendent and principals in the smaller systems to an extended series of seminars in Calgary Public. The expectation that such activities would result in changes in attitudes, values, and skills in addition to changes in knowledge implies a "normative-reeducative" strategy in the Chin and Benne formulation.

6. Few instances of structural change were located which were directly associated with the implementation of the practice. Those which occurred were largely a part of major system reorganization which took place at the same time (Bow Corridor, Calgary Public, Foothills and County of Strathcona). Only one instance was identified where additional staff was hired to cope with the demands of decentralized school budgeting. The equivalent of one full-time person was added to staff in the Division of Support Services in Calgary Public.

7. There were major changes in the roles of school system personnel with principals, other school administrators, teachers, and school secretaries generally devoting more time to the preparation of budgets and purchasing, and principals and secretaries spending more time on record-keeping. A major change in role for central office personnel concerned subject supervisors in the larger systems. These persons no longer controlled school expenditure in those accounts which were decentralized. Superintendents generally reported spending the same amount of time on school budgeting, while non-instructional personnel at central office who were involved in budgeting devoted more time to the task. The roles of trustees changed in four systems, namely, Bow Corridor, Camrose Public, County of Strathcona, and Edmonton Public, where

individual school budgets were considered by the board.

8. It is apparent that a variety of strategies have been employed to implement the practice in the different systems. Indeed, no single change strategy appeared to be predominant in any particular system as elements of different strategies in the various formulations appear in combination or in sequence in each instance. This diversity within systems reflected, to a degree, the lack of an overall plan for the change process.

Problems of implementation. *What problems have been encountered by school systems in implementing decentralized school budgeting?*

The summary and conclusions set out below focus on the major problems found in the generalizing analysis in Chapter 13 to be common to the experience of two or more systems as well as those in a particular system which appear to have special significance.

1. The major problems encountered by central office personnel were concerns at the extent of the practice and the items to be decentralized, the resistance of some subject supervisors in the larger systems, violation of guidelines by schools, difficulty associated with the use of the PAB classification, and establishing procedures for providing information.

Similar problems to those outlined above were experienced in the pilot projects in Edmonton Public and Calgary Public. The comprehensive nature of the practice in Edmonton was reflected in the larger number of persons encountering difficulties. These included persons in the Finance, Curricular Services, Personnel, and School Facilities departments as well as the Superintendent and System Planner. Special concerns related to the two budget years observed in the system, difficulties in providing information at all stages of the process, and staffing allocations. No problems were reported with the PAB classification since the system had five years of experience with the procedures. Information was provided which indicated strong differences of opinion at the senior management level on the merits of decentralization.

2. The major problems encountered by principals concerned their own role and technical difficulties in the administration phase. Lack of skill, experience and guidelines, and the increased workload were frequent concerns related to role. Difficulties associated with the PAB classification and lack of information on costs and expenditures were major problems in administering budgets. Other problems reported at the school were related to the nature of teacher involvement, being perceived variously as too high or too low, and the difficulties encountered by secretaries in the administration phase.

The problems encountered by schools in the pilot projects differed in several respects from those noted above. Problems associated with role were not apparent since principals were volunteers in most instances. No difficulties were reported with the PAB classification in Edmonton Public.

3. The Edmonton Public pilot was monitored by the Local of the ATA. A meeting was observed at which concerns were expressed with respect to: (i) allocations for staff and the possibility of decisions which might lead to a reduction of certificated personnel, (ii) time spent on budgeting by principals and teachers, (iii) potential for inequities, (iv) increased levels of conflict at the school level, and (v) allocations for substitute teachers.

A potential concern in Edmonton Public related to the collective agreements for maintenance and custodial employees and the possibility that custodians may be asked to perform tasks normally completed by maintenance workers.

4. The problems identified were consistent with those suggested in the review of theory and practice in Chapters 2 and 3 respectively. Problems of role conflict and communication emerged as critical concerns. Several difficulties were associated with the PAB classification which was introduced, in some instances, in the same year as decentralized school budgeting. In other systems, the advent of decentralization represented the first experience in PAB for school personnel.

Preparation and administration of school budgets. *What procedures are followed to prepare and administer school budgets in school systems which have implemented decentralized school budgeting?*

1. Several major differences in budget practice reflected the criteria for selection in this stage of the study, with five systems requiring schools to prepare budgets and one not. The decentralization for the latter, Calgary Separate, was associated with decisions made in the administration phase of the budget process. The distinctive structural characteristics in Bow Corridor resulted in an additional review stage at the Regional District level, above that of the local board, while the area units of administration in Calgary Public meant an additional review stage between the school and central office.

2. Constraints and guidelines for schools were determined by central office personnel subject to the review of the board. Allocations to schools were of two types: (i) standardized per pupil allocations, or

(ii) a lump sum amount determined on the basis of past patterns of expenditure in each school. Allocations for each year were adjusted on an annual basis for factors such as inflation and changes in enrolment and program.

3. There was a variety among the systems and within each system with respect to procedures employed at the school level to prepare budgets. The major points of difference were associated with the nature and extent of teacher involvement, the length of budget preparation time, and the complexity of the budget document submitted by the principal.

4. Differences existed among the seven systems with respect to the extent to which schools actually prepared a budget in the contemporary sense of the term. A varying degree of program budgeting was evident at the school level except in Foothills where the Superintendent requested a simple line-item document. All systems and schools followed an incremental rather than a zero-base approach.

5. The procedures employed at central office to administer school budgets varied according to: (i) the nature of the discretion given to schools to transfer funds, (ii) purchasing and accounting practice, and (iii) the method of reporting to schools. The procedures employed at the school level generally reflected the constraints established by central office personnel. In several systems the process of formally requesting permission to transfer had been abandoned because of the workload associated with approving such requests with schools, instead, simply underspending or overspending in budget categories, subject to limits established by the total of their decentralized accounts.

6. The distinction between controllable expense (high discretion to

transfer) and non-controllable expense (transfers permitted only with central office approval) formed the basis of the practice in Calgary Separate. Flexibility with respect to staffing was possible under the provisions of the latter with some schools exchanging the services of teachers and teachers' aides. Evidence of a formal vote by teachers at a school approving the exchange was required by central office administrators.

7. The analysis of practice in the seven systems provided additional evidence to that obtained in the first stage of the study that decentralized school budgeting in an Alberta context is highly controlled.

Operational problems. *What operational problems have been encountered in school systems which have implemented decentralized school budgeting?*

An analysis of problems in the five systems where the change had been stabilized revealed several concerns common to two or more systems and some interesting contrasts with those encountered during the implementation phase of the change process.

1. No instances were cited of resistance to the practice on the part of central office administrators although there was evidence of role conflict for some area superintendents in Calgary Public.

2. Problems of control became more apparent in several systems. These developed as a consequence of factors such as an accumulation of deficits by some schools and school expenditures considered to be inappropriate. Most problems encountered by central office personnel lay in the administration phase of the budget process with difficulties still being experienced with violation of guidelines by some schools and

the general, but declining, problems with the PAB system.

3. Most problems at the school level occurred in the administration phase and were generally similar in nature to those in the first year of implementation. There were, however, three points of difference with the earlier stage: (i) except in Calgary Public, there were fewer concerns related to role, (ii) principals in four systems (only one in the earlier stage) reported inadequate allocations, thus supporting the contention of a central office administrator in one system that decentralized budgets are subject to "downward pressure" during periods of inflation, and (iii) problems related to the adequacy and frequency of reports to schools were reported in more systems.

4. A relatively large number of operational problems were reported by principals in Calgary Public, many of whom perceived that the constraints established in the budgeting process by the Division of Support Services were unnecessarily restrictive, a view which was supported by a management study in early 1977.

5. The operational problems identified in the study are consistent with those described in the literature as dysfunctions in budgeting systems and problems of decentralization. These may be generally classified as problems of role conflict, communication, procedure, control, and goal displacement.

Disagreements in decentralized budgeting. *How do central office administrators and principals perceive the effects of decentralized school budgeting on the frequency and severity of disagreements related to school budgeting?*

Changes in personnel and structure in four systems and the length of time since the change was implemented in a fifth meant that this study afforded little opportunity to obtain perceptions of the effects of decentralized school budgeting on the frequency and severity of disagreements related to budgeting in the six systems other than Edmonton Public. The limited amount of data suggested that, except in Calgary Public and, to a lesser extent, Calgary Separate, decentralization was generally perceived to have had no effect or to have resulted in less frequent and less severe disagreements among system personnel. Some respondents in Calgary Public considered that there had been an increase in both frequency and severity of disagreements among central office personnel, between principals and central office personnel, and between principals and teachers. These respondents referred to the "increased opportunity for disagreement" in this system.

Corwin (1970) suggested that, for routine decision-making, the extent of participation was positively related to the number of disputes but inversely related to the number of major disputes. There is a need for further study to examine these interactions in the context of school budgeting. The conceptualization of conflict offered by Schmidt and Kochan (1972:365) was suggested in Chapter 13 as a suitable framework for such a study. These writers suggested that "potential for conflict [between organizational units] depends on the extent to which resources are shared, the degree of interdependence, and perceived incompatibility of goals."

Attainment of objectives. *What differences occur between the perceptions of central office administrators and principals in respect to the extent to which the objectives of decentralized school budgeting have been attained?*

Respondents in systems other than Edmonton Public were asked to indicate their perceptions of the progress which had been made toward the attainment of the objectives of subsidiarity, equity, efficiency, flexibility, innovation, adaptability and accountability. The nature and perceived value of these objectives were reviewed earlier in this summary.

1. Only for the objective related to the involvement of principals was there a relatively high degree of progress seen by respondents. Different groups in different systems perceived a relatively low degree of progress for the other objectives, especially for those relating to efficiency, innovation (not a highly valued objective), adaptability, and accountability.

2. Differences occurred between the perceptions of central office administrators and principals in twelve of the thirty-six comparisons where both groups generally agreed that the objective had a high value. These differences occurred mainly on three objectives: efficiency (difference in three systems), adaptability (difference in four systems), and accountability (difference in three systems).

3. Remarks by respondents suggested that the achievement of the objective of flexibility was constrained by the amount of allocations and the degree of control exercised by central office. Delays in the purchasing system were perceived by some respondents to constrain the

achievement of the objective concerned with adaptability while achievement of the objective of accountability was seen by some to be constrained by the lack of an adequate planning model, inadequate controls, and difficulty in developing adequate methods of reporting to schools.

Preferences for change. *What changes to current decentralized school budgeting practice are preferred by central office administrators and principals?*

1. A majority of respondents preferred no change to existing practice. Only three of 159 responses obtained for this item reflected a preference for a lower degree of decentralization.

2. Those preferring more authority invariably referred to staffing as a category which should be decentralized. Those preferring more operational flexibility usually described a need for a relaxation of central office controls on transferability.

3. Important differences between the preferences of central office administrators and principals appeared in only four of the eighteen comparisons contained in the analysis.

Satisfaction with decentralized school budgeting. *What differences occur between central office administrators and principals in respect to the extent of their satisfaction with current decentralized school budgeting practice?*

1. Only one of the fifty-three respondents indicated that he was dissatisfied with decentralized school budgeting.

2. There were no important differences between the levels of satisfaction of central office administrators and principals with the

exception of Bow Corridor where the Superintendent indicated his dissatisfaction with the progress made in that system.

3. Many respondents qualified their answers by referring to the problems summarized earlier in this section.

IMPLICATIONS

The implications of the study are considered to lie in two areas. These concern: (1) the practice of educational administration, and (2) the development of theory.

The Practice of Educational Administration

A major limitation of the case approach adopted for this study is the relatively low level of generalizability of the findings. The implications set out below are offered, subject to this limitation, with the view that experiences within the seven systems point to issues which should be considered by administrators contemplating the implementation of a form of decentralized school budgeting. Information collected in each of the systems considered in the second stage of this study suggests, however, that situational factors in a system may give rise to issues and concerns which may not be present or important elsewhere and which are not included in the list below.

1. The findings of this study suggest that the adoption of a form of decentralized school budgeting involves much more than a change in the location at which a budget is prepared and/or administered. The movement of decision-making from the central office to a school, by itself a change in structure, has important and interdependent consequences

for the task, personnel, and technology aspects of school system operations. The larger the number of items included in decentralized accounts, the more extensive these changes are likely to be.

2. The far-reaching nature and effect of changes to a budgeting system imply that a policy analysis should be undertaken before a school system embarks on a process of decentralization. The purpose of such an analysis should conform to that suggested by Stringham (1974:10):

> The aim of policy analysis is to provide methods for the identification of policy alternatives. Innovation of new alternatives and selection of the best alternatives from those available constitute the two distinct but interrelated elements of this activity. A concern with underlying values, understanding and predicting the behaviour of various individuals, groups, organizations, etc., and political feasibility is desired.

It may emerge from such an analysis that decentralization is not an appropriate alternative in a particular situation.

3. Information collected in the study supports the findings in the literature (Zand and Sorenson, 1975) that a successful change is associated with attention to each of the "unfreezing," "moving," and "refreezing" stages of the change process. The resistance to change and role conflict reported in the initial period of decentralization points to the importance of the "unfreezing" stage. A major implication is that changes in attitudes toward decentralization and recognition of a need for change must accompany changes in procedure and the development of new skills. This suggests, in turn, the desirability of a broad involvement of system personnel in assessing the need for change and planning the change. In-service activities which focus only on procedures and the development of technical skills fall short of the requirements of the "unfreezing" stage.

4. The third implication above suggests that pilot projects have serious limitations in preparing for change if their primary focus is on technical or procedural aspects of decentralization. Problems associated with the role of school personnel may not be apparent if participants volunteered for the project. A major implication is that a pilot should be accompanied and followed by strategies which focus on the "unfreezing" aspect for all personnel who may be subsequently affected by the system-wide implementation.

5. The experience of all systems points to the desirability of developing an adequate management information system prior to the implementation of a form of decentralized school budgeting. It is evident that central office and school personnel require accurate and timely information on past expenditure patterns, program costs, enrolment trends, and expenditures and encumbrances during the fiscal year. Such an information system will clearly be more complex in a large system than in a small system.

6. A consequence of several of the above implications is that the number and type of problems encountered will likely increase with the complexity of the school system.

7. Initial experience in the Edmonton Public pilot suggests that careful consideration should be given to the desirability and feasibility of decentralizing budget decisions related to staff. Job security was, understandably, a critical area of concern for certificated and non-certificated staff, including maintenance and custodial employees. This experience points to the need for procedures and constraints which take account of these concerns and which can be readily communicated to all who may be affected by the change.

8. It was apparent that the functions of budgeting were emphasized in different ways in the systems considered in this study. The Edmonton Public pilot, for example, emphasized the planning function with requirements for detailed budget submissions and relatively narrow limits of school discretion to make subsequent alterations to the pattern of allocations. Calgary Separate, on the other hand, emphasized the control function, in that areas of a school budget are clearly delineated as either controllable (high discretion to transfer) or non-controllable (transfers require approval) with no requirement that schools prepare a budget. The consequences of the different approaches with respect to the amount of work required for school and central office personnel, in both planning and administering budgets, should be recognized. A major implication is that administrators should be aware of the different conceptualizations of budgeting and of their behavioural consequences.

9. Information was provided in several systems indicating that increases in per pupil or lump-sum allocations in school budgets had not matched the rate of inflation. These allocations seem susceptible to "downward pressure" at the central office and board levels in these systems. Administrators should be aware of the possibility of such pressures.

10. The trend in several systems to increased central office control through additional constraints on schools in the budgeting process suggests that pressures for "recentralization" may appear following initial experience with decentralized school budgeting. The experience in Calgary Public indicates that an increasingly controlled form of decentralization may lead, in turn, to a questioning by school personnel of the merits

of the practice. These experiences suggest a critical balance between the functional and dysfunctional aspects of controls and imply a need for a continuing, joint assessment of their nature and purpose by central office and school administrators.

11. Information gathered in this study suggests that central office administrators and principals may be susceptible to different perceptions of the extent to which decentralized school budgeting results in: (i) a more efficient allocation of funds at the school level, (ii) a reduction in the time required to meet changing school needs, and (iii) the extent to which system personnel become aware of the relationship between program objectives, program outcomes, and the costs involved.

12. Most central office administrators and principals interviewed in the six systems other than Edmonton Public expressed a high level of satisfaction with the practice and desired no change in the degree of decentralization. These findings suggest that, despite the many problems which may be encountered, systems contemplating the adoption of a limited form of decentralized school budgeting may have reasonable expectations of its acceptance. There is a need, however, for further study in the more highly decentralized practice involving staff decisions such as that implemented in the Edmonton Public pilot.

The Development of Theory

The findings of this study have a number of theoretical implications. These concern the three concepts which formed the basis of the framework for the study; namely, decentralization, budgeting, and organizational change, and the related instrumentation.

Decentralization. The definition of decentralized school budgeting adopted in this study was derived from the literature of public administration and organizational theory which conceptualized decentralization in terms of a delegation of authority.

Information gathered in the first stage of the study indicated that statutory and regulatory requirements established at the provincial level ensured that a board must constrain budget decisions made by school personnel if it is to meet its responsibilities. The effect of these constraints was illustrated in the second stage of the study where it was found that all budget decisions are subject to some form of review at least at the central office level. While the observed practice was not inconsistent with the constitutive and operational definitions adopted for the study, the findings do raise the possibility that the conceptualization of decentralization in terms of a delegation of authority is too restrictive for the context of the administration of local school jurisdictions, at least in Alberta.

It is suggested that the phrase "opportunity to influence" is more appropriate than "delegation of authority" in describing the process of budget preparation considered in this study. This suggests, in turn, a broadening of the concept of decentralization along the lines proposed by Flanagan (1976:114) in his analysis of policy-making in institutions of higher education:

> Decentralization, then, refers to the relative diffusion of the ability to make policy decisions, gain access to information relevant to policy decisions and/or influence policy decisions within an organization structure. Centralization refers to the relative concentration of the same.

Budgeting. Irvine (1970:16) reached the following conclusion from a review of literature dealing with the outcomes of budgeting systems:

> The major proposition suggested is that a budgeting system designed to accomplish . . . designated benefits is something more than series of figures. Its origination, implementation, and degree of success are significantly related to the behaviourally-oriented problems that can easily arise.

This study of decentralized school budgeting in Alberta lends support to his proposition.

Instrumentation. The findings of this study suggest the need to make several changes to the instrument used to determine the extent of decentralized school budgeting.

1. The broader conceptualization of decentralization in terms of influence should be incorporated in the framework.

2. The second change is a consequence of a limitation of the instrument used in this study which was acknowledged in Chapter 4. The degree of decentralization was obtained (following criteria described by Seward, 1975) by calculating the total number of decisions (School Budget Authority Scale) and transfers (Operational Flexibility Scale) made by a school. Information concerning the amount of money in decentralized accounts was not sought. Experience in several systems, where the amount of allocations was perceived to be insufficient to give school personnel the opportunity to exercise discretion, suggests that provision should be made for this variable.

3. The third change arises from the analysis of practice in Calgary Separate which was highly centralized in the preparation phase and highly decentralized in the administration phase. Such a pattern was considered

in this study and by personnel in that system to be an instance of decentralized school budgeting since budget decisions made by schools were in the form of reallocations. The information gathered in the study indicated, however, that there was generally a minimal level of planning associated with the discretion to reallocate. This raises the question as to whether the practice constitutes decentralized school budgeting since the notion of planning is fundamental to the conceptualization of budgeting. This implies a need to include as a variable the extent of planning at the school level.

Organizational change. There are two implications for the development of theory related to organizational change.

1. The political model proposed by Baldridge (1971, 1974) was utilized in the framework for the analysis of internal factors influencing the introduction and development of decentralized school budgeting. Central to the model was the presence of organizational interest groups responding to multiple pressures generated from internal and external sources. This study demonstrated the utility of the model in the context of organizational change within a school system. It is acknowledged, however, that the broad scope of this study and the research methodology precluded development of the more substantial framework which full use of the model demands.

2. The findings raise questions about the utility and applicability of the various classifications of strategies for planned change in describing major organizational change involving many interest groups over an extended period of time. The findings point to the need for expanding the literature which describes how change is and ought to be

accomplished. This study has provided information related to the first of these purposes.

RECOMMENDATIONS

Further Research

The following general suggestions are made for further research into decentralized school budgeting:

1. The instrument used in this study to determine the extent of decentralization should be refined along the lines suggested in earlier analysis in this chapter and used in further studies.

2. The case approach in this study has permitted the identification of a large number of critical variables affecting the adoption, operation and outcomes of decentralized school budgeting. There is a need for further studies, each having a much narrower focus than this exploratory investigation, which utilize these findings in the manner suggested below.

3. There remains a need to investigate further the factors associated with the adoption of decentralized school budgeting.

4. Further research of the kind conducted by Seward (1975) in California should be undertaken in a Canadian context. Such studies should include analysis of variance over time: (i) within a school system, for comparing expenditure before and after decentralization, and (ii) among systems, for comparing expenditures in systems with varying degrees of decentralized school budgeting. These studies will permit an examination of the extent to which school personnel actually use their discretion to expend funds in a manner which is different to that which is possible with centralized school budgeting.

5. This study obtained the perceptions of respondents with respect to the objectives and outcomes of decentralized school budgeting. This information, together with the criteria suggested in Chapter 12 for the evaluation of the Edmonton Public pilot, provides a useful starting point for a further study focusing on the effectiveness of decentralized school budgeting systems.

6. This study has focused on the movement of decisions from the central office to the school. There is a need for further study concerning the budget process within the school. Such a study would afford an opportunity to explore further the incidence of conflict in budgeting and the effect of decentralization. The conceptualization of conflict offered by Schmidt and Kochan (1972), cited earlier in this chapter, is suggested as a suitable framework.

7. There remains a general lack of information on the nature and extent of decentralized school budgeting in Canada. One or more studies should be undertaken to remedy this need.

8. Much of the further study recommended above should be undertaken in systems which have decentralized the staffing categories of the school budget. A decision by Edmonton Public to implement school-based budgeting on a system-wide basis will afford such an opportunity.

Systems Interested in Decentralized School Budgeting

The implications of the study for the practice of educational administration set out earlier in this chapter contained a number of suggestions for persons interested in decentralized school budgeting. The identification of a large number of problems common to the experience of the seven systems considered in the second stage of this study suggests, in addition, the need for a sharing of information related to the practice. This need forms the basis of the following recommendations:

1. It is recommended that school systems which have implemented or are considering the implementation of a form of decentralized school budgeting consider the formation of a consortium to facilitate the sharing of information related to the practice. In an Alberta context, the initiative for this action might be taken by the Alberta School Trustees' Association, The Alberta Teachers' Association, the Conference of Alberta School Superintendents, or administrators in any of the systems which are currently decentralized.

2. The interest of the consortium might be expanded to school-based management in general.

3. The findings in this study suggest a number of areas of critical concern which should be the focus of immediate attention. These include the development of information systems, planning models, and strategies of organizational change. Much of the research suggested above might be sponsored by the consortium.

4. The nature of the various developmental and service activities should be determined by a body representative of all interest groups, including the Department of Education, trustees, superintendents, other central office personnel, principals, and other certificated and non-certificated personnel at the school level.

5. Persons assisting the consortium might include consultants from government agencies, universities, or the private sector, and administrators

with experience in decentralized school budgeting in Canada and the United States.

POSTCRIPT

The survey conducted in the first stage of this study found that school systems in Alberta generally lie at the centralization end of a centralization-decentralization continuum in budgeting. Despite their placement in the upper quartile on this continuum, six of the seven systems considered in the second stage were highly centralized in the staffing categories which, in terms of dollars, represent the major portion of a school budget.

The major contribution to knowledge made by this study thus lies in its findings that most school budgeting practices in Alberta are highly centralized, and that even in those systems which are self-described as "decentralized," the degree of decentralization in budgeting is actually very small. For this reason, it was most difficult to reach general conclusions about decentralized budgeting, let alone comprehensive and accurate generalizations from the seven cases studied.

A second contribution lies in the identification of issues which have confronted seven school systems which have introduced a measure of decentralization.

BIBLIOGRAPHY

BIBLIOGRAPHY

Alberta
1955 The Alberta School Trustees' Association Act. Chapter 300 of the Revised Statutes of Alberta.

1970a The County Act. Chapter 71 of the Revised Statutes of Alberta.

1970b The Teaching Profession Act. Chapter 362 of the Revised Statutes of Alberta.

1970c The School Act. Chapter 329 of the Revised Statutes of Alberta.

Alberta, Department of Education
1966 Sixty-first Annual Report of the Department of Education. Edmonton: Queen's Printer.

1970 Sixty-fifth Annual Report of the Alberta Department of Education. Edmonton: Queen's Printer.

1973 "Improving School Management through PAB and PPBES." Unpublished document, Department of Education.

1975a Program Accounting and Budgeting: Classification and Coding Manual. Edmonton: Department of Education.

1975b The Seventieth Annual Report: April 1, 1974 to March 31, 1975. Edmonton: Department of Education.

1977 Regulations. A consolidation of the regulations under the purview of the Department of Education.

Alberta, Department of Municipal Affairs
1973 FIS Operations Manual: A Financial Information System for Municipalities. Edmonton: Department of Municipal Affairs.

Alberta School Trustees' Association
1976 Members' Handbook 1976. Edmonton: Alberta School Trustees' Association.

Alberta Teachers' Association
1976 Members' Handbook: 1976 Edition. Edmonton: Alberta Teachers' Association.

Altshuler, Alan A.
1970 Community Control. Indianapolis: Pegasus.

Baldridge, J. Victor
1971 Power and Conflict in the University. New York: John Wiley and Sons, Inc.

1974 "Organizational change: the human relations perspective versus the political systems perspective." Educational Researcher, 1(2): 4-10, 15.

Baldridge, J. Victor and Robert A. Burnham
1975 "Organizational innovation: individual, organizational, and environmental impacts." Administrative Science Quarterly, 20:165-176.

Baldridge, J. Victor and Terrence E. Deal
1975 Managing Change in Educational Organizations. Berkeley, California: McCutchan Publishing Corporation.

Bartlett, Alton C. and Thomas A. Kayser (eds.)
1973 Changing Organizational Behaviour. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Belasco, James A. and Joseph A. Alutto
1972 "Decisional participation and teacher satisfaction." Educational Administration Quarterly, 8:44-58.

Blacker, David A.
1971 "Teachers' and Principals' Perceptions of School Budget Decentralization." Unpublished Master's thesis, University of Alberta.

Breau, F.H.
1969 "A Study of Participation for Educational Change in Quebec." Unpublished Master's thesis, University of Alberta.

Bresnick, David
1974 "Cyclical renewal in a large city school district: decentralization and the policy process." Educational Administration Quarterly, 10(2):19-34.

Brick, Edward Michael
1971 "A Developed Model of School District Decentralization for Decision-making." Unpublished Doctoral dissertation, United States International University.

Burns, Tom and G.M. Stalker
1961 The Management of Innovation. London: Tavistock Publications.

Burroughs, Robert Eugene
1973 "Decentralization and Decision Making: an Analysis of Elementary School Principals' and Central Office Administrators' Perceptions." Unpublished Doctoral dissertation, University of Southern California.

Burrup, Percy E.
1974 Financing Education in a Climate of Change. Boston: Allyn and Bacon, Inc.

Calgary Board of Education
1975 Final Report of the Decentralized Budget Monitoring Committee. Unpublished document, Calgary Public School Board.

1977a Final Report from P.S. Ross & Partners, Management Consultants, to the Calgary Board of Education.

1977b "Review of the Educational Divisions of the Calgary Board of Education." An Interim Report from P.S. Ross & Partners, Management Consultants, to the Calgary Board of Education.

Calgary Public School Board
1967 "Direction for Education." Report of the Elementary School Program Commission of the Public School Board, Calgary, 1965-1967.

1971 Report of the Decentralized Budget Committee. Unpublished document, Calgary Public School Board.

1972 Final Report of the Junior High School Programme Commission, Calgary Public School Board.

1973a "Review of Organization Structure." A Report from Woods, Gordon and Co., Management Consultants, to the Calgary Public School Board.

1973b Minutes of Special Meeting of the Board of Trustees, February 14, 1973.

Camrose School District #1315
1977 "Individual School Mini-budget." Unpublished document, Camrose School District #1315.

Carlisle, Howard M.
1974 "A contingency approach to decentralization." Advanced Management Journal, 39(3):9-18.

Cawelti, Gordon
1975 "Urban school decentralization and curriculum development strategies." In I. Ezra Staples (ed.), Impact of Decentralization on Curriculum: Selected Viewpoints: 18-27. Washington, D.C.: Association for Supervision and Curriculum Development.

Cawelti, Gordon and Bruce Howell
1971 "Help for the man in the middle." School Management, 15(3): 22-23.

Chapman, Robin
1973 "Decentralization: another perspective." Comparative Education, 9(3):127-134.

Child, John
1973 "Predicting and understanding organizational structure." Administrative Science Quarterly, 18:168-185.

Chin, Robert and Kenneth D. Benne
1969 "General strategies for effecting changes in human systems." In Warren G. Bennis, Kenneth D. Benne and Robert Chin (eds.), The Planning of Change. Second edition: 35-62. New York: Holt, Rinehart and Winston, Inc.

Cillié, Francois S.
1940 Centralization or Decentralization? New York: Bureau of Publications, Teachers' College, Columbia University.

Coleman, Peter
1972a "The perils of bigness." Educational Administration Quarterly, 8(2):58-78.

1972b "Organizational effectiveness in education: its measurement and enhancement." Interchange, 3(1):35-45.

Coons, John E., William H. Clune III, and Stephen D. Sugarman
1970 Private Wealth and Public Education. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.

Cormier, Roger A.
1971 "Of significant and important differences." Alberta Journal of Educational Research, 17(1):33-42.

Corwin, Ronald G.
1970 Militant Professionalism: A Study of Organizational Conflict in High Schools. New York: Appleton-Century-Crofts.

County of Strathcona #20
1974 "Policy Regarding School Accounting and Budgeting 1975." Unpublished document, County of Strathcona #20.

Cunningham, Luvern L.
1968 "Organization of education in metropolitan areas." In Robert J. Havighurst (ed.), Metropolitanism: Its Challenge to Education. The Sixty-Seventh yearbook of the National Society for the Study of Education: 91-122. Chicago: The University of Chicago Press.

Dahl, Robert A.
1970 Modern Political Analysis. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Dale, Ernest
1967 Organization. New York: American Management Association.

Daneliuk, C.
1972 "Budget Decentralization Report." Memorandum to Dr. Rolland W. Jones, Superintendent, Edmonton Public School Board, March 3.

Deane, Edward
1975 "Toward school-based management: a case study." Kappa Delta Pi Record, 12(2):52-54.

Dessler, Gary
1976 Organization and Management: A Contingency Approach. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Dror, Yehezkel
1973 "Policy analysts: A new professional role in government service." In Philip H. Melanson (ed.), Knowledge, Politics and Public Policy: 148-157. Cambridge, Massachusetts: Winthrop Publishers.

Dye, Thomas R.
1975 Understanding Public Policy. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Easton, David
1965 A Systems Analysis of Political Life. New York: John Wiley and Sons, Inc.

Edmonton Public Schools
1971 "EPSA: Educational Planning by the Systems Approach." Unpublished document, Edmonton School District #7.

Erickson, D.A., et al.
1970 Educational Flexibility in an Urban School District. Vancouver, B.C.: Educational Research Institute of British Columbia.

Faison, Helen Smith
1975 "An Analysis of Social, Political, and Economic Factors Relating to the Attempted Decentralization of Large Urban School Districts." Unpublished Doctoral dissertation, University of Pittsburgh.

Fantini, Mario and Marilyn Gittell
1973 Decentralization: Achieving Reform. New York: Praeger Publishers.

Fesler, James W.
1968 "Centralization and decentralization." International Encyclopaedia of the Social Sciences, Vol. 2.

Filley, Alan C., Robert J. House and Steven Kerr
1976 Managerial Process and Organizational Behaviour. Glenview, Illinois: Scott, Foresman and Company.

Finnman, James E.
1970 "Budget Procedures in School Divisions in Alberta." Unpublished Master's thesis, University of Alberta.

Flanagan, Dan
1976 "Policy formulation: an analysis of organizational decision-making styles." Planning and Changing, 7(3):113-120.

Foothills School Division #38
1970 Minutes of meeting of the Board of Trustees, February 10, 1970.

Fox, David J.
1969 The Research Process in Education. New York: Holt, Rinehart and Winston, Inc.

Furniss, Norman
1974 "The practical significance of decentralization." The Journal of Politics, 36(4):958-982.

Garvue, Robert J.
1969 Modern School Finance. Toronto: The MacMillan Company Collier-MacMillan Limited.

Gee, Wilson
1950 Social Science Research Methods. New York: Appleton-Century-Crofts, Inc.

Gibson, James L., John M. Ivancevich and James H. Donnelly, Jr.
1973 Organizations: Structure, Processes, Behaviour. Dallas, Texas: Business Publications, Inc.

Good, Carter V.
1972 Essentials of Educational Research. Second edition. New York: Meredith.

Gorden, Raymond L.
1975 Interviewing: Strategies, Techniques and Tactics. Homewood, Illinois: The Dorsey Press.

Gordon, Eric and Grace Iverson
1976 "Needs Assessment Model in an Urban Decentralized School System." Paper presented at the Annual Meeting of the American Educational Research Association, April 19-23, San Francisco.

Green, Duncan
1975 "The involvement of the public in education: a major development." Education Canada, 15(4):4-9.

Greenfield, T. Barr
1972 "Developing accountability in school: some guidelines." Education Canada, 12(1):21-29.

Greenfield, T. Barr, et al.
1969 Developing School Systems: Planning, Organization and Personnel. Toronto: Ontario Institute for Studies in Education.

Greiner, Larry E.
1973 "Patterns of organization change." In Alton C. Bartlett and Thomas A. Kayser (eds.), Changing Organizational Behaviour: 46-63. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Guthrie, James W., et al.
1971 Schools and Inequality. Cambridge, Massachusetts: The MIT Press.

Hage, Jerald
1965 "An axiomatic theory of organizations." Administrative Science Quarterly, 10:289-320.

Hage Jerald and Michael Aiken
1970 Social Change in Complex Organizations. New York: Random House.

Hall, Richard H.
1972 Organizations: Structure and Process. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Hart, David K.
1972 "Theories of government related to decentralization and citizen participation." Public Administration Review, 52 (October, Special Edition): 603-621.

Havelock, Ronald G.
1973 The Change Agent's Guide to Innovation in Education. Englewood Cliffs, N.J.: Educational Technology Publications.

Herman, Jerry J.
1976 "If you want strong principals, give them a real role." The Clearing House, 49(6):271-272.

Hewitson, Malcolm
1975 "Professional Satisfaction of Beginning Teachers." Unpublished Doctoral dissertation, University of Alberta.

Holdaway, E.A.
1974 "Decentralization of education: constraints and structures." In Eugene W. Ratsoy and Donald M. Richards (eds.), Decentralizing Decision-Making Within School Systems: 46-61. Edmonton: Department of Educational Administration, University of Alberta.

1975 "Some concerns, ideas and approaches of school administrators." The Canadian Administrator, 15(1):1-4.

Holsti, Ole R.
1969 Content Analysis for the Social Sciences and Humanities. Reading, Massachusetts: Addison-Wesley Publishing Company.

Holton, John B.
1973 "Computer helps demonstrate fiscal management of school programs." A.E.D. Journal, 6(3):89-92.

Irvine, V. Bruce
1970 "Budgeting: functional analysis and behavioral implications." Cost and Management, 44(2):6-16.

Jaffary, Karl D.
1975 "The Administration of the Toronto School System." A report of the Decentralization Study Team of the Toronto Board of Education. Toronto: Toronto Board of Education.

Jones, Garth N.
1969 Planned Organizational Change. London: Routledge & Kegan Paul.

Jordan, K. Forbis
1969 School Business Administration. New York: The Ronald Press Company.

Katz, Daniel
1953 "Field studies." In Leon Festinger and Daniel Katz (eds.), Research Methods in the Behavioral Sciences: 56-97. New York: The Dryden Press.

Katz, Daniel and Robert L. Kahn
1966 The Social Psychology of Organizations. New York: John Wiley & Sons, Inc.

1975 "Organization change." In J. Victor Baldridge and Terrence E. Deal (eds.), Managing Change in Educational Organizations: 35-74. Berkeley, California: McCutchan Publishing Corporation.

Kerlinger, Fred N.
1964 Foundations of Behavioral Research. New York: Holt, Rinehart and Winston, Inc.

1973 Foundations of Behavioral Research. Second edition. New York: Holt, Rinehart and Winston, Inc.

King, Robert Edward
1966 "An Evaluation of the Decentralized Form of School Administration." Unpublished Doctoral dissertation, The George Washington University.

Kirst, Michael W.
1975 "The rise and fall of PPBS in California." Phi Delta Kappan, 56(8):535-538.

Knezevich, Stephen J.
1973 Program Budgeting (PPBS). Berkeley, California: McCutchan Publishing Corporation.

Knezevich, Stephen J. and John Guy Fowlkes
1960 Business Management of Local School Systems. New York: Harper & Brothers.

Koontz, Harold and Cyril O'Donnell
1976 Management: A Systems and Contingency Analysis of Managerial Functions. New York: McGraw-Hill Book Company.

La Noue, George R. and Bruce L.R. Smith
1973 The Politics of School Decentralization. Lexington, Massachusetts: D.C. Heath and Company.

Lawrence, Paul R.
1973 "How to deal with resistance to change." In Alton C. Bartlett and Thomas A. Kayser (eds.), Changing Organizational Behaviour: 385-401. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Lawrence, Paul R. and Jay W. Lorsch
1967 Organization and Environment. Boston: Division of Research, Graduate School of Business Administration, Harvard University.

Leavitt, Harold J.
1973 "Applied organization change in industry: structural, technical, and human approaches." In Alton C. Bartlett and Thomas A. Kayser (eds.), Changing Organizational Behaviour: 30-45. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Levine, Donald M.
1975 "A model for implementing accountability systems in education." I.A.R. Research Bulletin, 15(2):1, 7-9.

Levinson, Eliot
1973 "The Alum Rock Voucher Demonstration: Three Years of Implementation." Paper presented at the Annual Meeting of the American Educational Research Association, April 19-23, San Francisco.

Lewin, K.
1947 "Frontiers in group dynamics." Human Relations, 1:5-41.

Lindblom, Charles E.
1968 The Policy Making Process. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Lippitt, Ronald, Jeanne Watson and Bruce Westley
1972 "The phases of planned change." In Newton Margulies and Anthony P. Raia (eds.), Organizational Development: Values, Process, and Technology: 71-81. New York: McGraw-Hill Book Company.

Lipset, Seymour M. et al.
1970 "Generalizing from a case study: problems of analysis." In Oscar Grusky and George A. Miller (eds.), The Sociology of Organizations: Basic Studies: 169-174. New York: The Free Press.

Los Angeles City Board of Education
1973 "Decentralization 1973: A Second-Year Progress Report." A report presented by the Decentralization Task Force to the Los Angeles City Board of Education.

Luthans, Fred
1973 Organizational Behavior. New York: McGraw-Hill Book Publishing Company.

MacKenzie, Kenneth D.
1974 "Organizational Change." In Joseph W. McGuire (ed.), Contemporary Management: Issues and Viewpoints: 224-243. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Mann, Floyd C. and Franklin W. Neff
1961 Managing Major Change in Organizations. Ann Arbor, Michigan: The Foundation for Research on Human Behaviour.

Matthews, Neville O.
1967 "A Study of the Decision Making Process of Two School Boards in an Alberta Community." Unpublished Doctoral dissertation, University of Alberta.

McCordic, W.J.
1969 "Urban education: an experiment in two-tiered administration." Lionel D. Feldman and Michael D. Goldrick, (eds.), Politics of Government of Urban Canada: 108-120. Toronto: Methuen.

1974 "Who's making the decisions and how?" Education Canada, 14(4): 43-51.

McNutt, James Norton
1975 "Decentralization: A Study of the Effect on Selected School Personnel in the Monroe County, Florida, School System." Unpublished Doctoral dissertation, University of Alabama.

Miklos, Erwin
1970 "Increased participation in decision-making." The Canadian Administrator, 9(6):25-29.

1974 "Forces affecting decentralization of decisions." In Eugene W. Ratsoy and Donald M. Richards (eds.), Decentralizing Decision-Making Within School Systems: 3-18. Edmonton: Department of Educational Administration, University of Alberta.

Moore, Mary T.
1975 "Local School Program Planning: Organizational Implications." A paper presented at the American Educational Research Association, March 31-April 4, Washington, D.C.

Moran, William E.
1971 "Measurement of decentralization in university organizations." American Education Research Journal, 8(2):203-220.

Morphet, Edgar L., Roel L. Johns, and Theodore L. Reller
1974 Educational Organization and Administration. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Mouly, George J.
1970 The Science of Educational Research. New York: Van Nostrand Reinhold Company.

Mueller, John H., Karl F. Schuessler and Herbert L. Costner
1970 Statistical Reasoning in Sociology. Boston: Houghton Mifflin Company.

Neal, W.D.
1964 "Centralization and decentralization." The Canadian Administrator, 3(8):31-34.

Newport-Mesa Unified School District
1976 "Planning Information for Instructional Operations." Unpublished document. Newport-Mesa Unified School District, California.

Nie, Norman H. et al.
1975 Statistical Package for the Social Sciences. Second edition. New York: McGraw-Hill Book Company.

Ontario, Ministry of Education
1973 Interim Report (No. 1) of the Select Committee on the Utilization of Educational Facilities.

1975 Final Report of the Select Committee on the Utilization of Educational Facilities.

Ornstein, Allan C.
1973 "Research on decentralization." Phi Delta Kappan, 54(9):610-614.

1975 "School decentralization: descriptions of selected systems." NASSP Bulletin, 59(389):24-33.

Ornstein, Allan et al.
1975 Reforming Metropolitan Schools. Pacific Palisades, California: Goodyear Publishing Company, Inc.

O'Shea, David
1974 "Theoretical Perspectives on School District Decentralization." Paper presented at the American Educational Research Association, April, Chicago.

Ovsiew, Leon and W.B. Castetter
1960 Budgeting for Better Schools. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Ovsiew, Leon, William B. Castetter and Adolph J. Koenig
1967 "Budgeting." In Warren E. Gauerke and Jack R. Childress (eds.), Theory and Practice of School Finance: 209-242. Chicago: Rand McNally and Company.

Owens, Robert G.
1974 "Conceptual models for research and practice in the administration of change." Journal of Educational Administration, 12(2):3-17.

Parry, A.E.
1976 "School-Based Budget: Pilot Project." Memorandum to M.A. Strembitsky, Superintendent, Edmonton Public School Board, September 2.

Perrow, Charles B.
1970 Organizational Analysis: A Sociological View. Belmont, California: Brooks/Cole Publishing Company.

Porter, David O. and Eugene A. Olsen
1976 "Some critical issues in government centralization and decentralization." Public Administration Review, 36(1):72-84.

Powell, Janet F.
1975 Decentralized Decision-Making. Arlington, Virginia: Educational Research Service.

Price, James L.
1968 Organizational Effectiveness. Homewood, Illinois: Richard D. Irwin.

Prout, Peter Francis
1977 "General and Specific Environmental Conditions in Relation to Community Education Developments in Canada's Provinces and Territories." Unpublished Doctoral dissertation, University of Alberta.

Pugh, D.S., et al.
1967 "A conceptual scheme for organizational analysis." Administrative Science Quarterly, 8:289-315.

1969 "The context of organization structures." Administrative Science Quarterly, 14:94-114.

Pyhrr, Peter A.
1977 "The zero-base approach to government budgeting." Public Administration Review, 37(1):1-8.

Ratsoy, Eugene, et al.
1976 School Staffing Practices: An Examination of Contingency Staffing and the Potential for Staff Differentiation in Alberta Schools. Edmonton: Department of Educational Administration, University of Alberta.

Rizzo, John R., Robert J. House and Sidney I. Lirtzman
1970 "Role conflict and ambiguity in complex organizations." Administrative Science Quarterly, 15:150-163.

Robinson, Norman and Donald A. Erickson
1971 "Project flexibility." B.C. School Trustee, 27(2):6-11.

Roe, William H.
1961 School Business Management. New York: McGraw-Hill.

Rogers, Everett M.
1962 Diffusion of Innovations. New York: The Free Press.

Rowe, Lloyd A. and William B. Boise
1974 "Organizational innovation: current research and evolving concepts." Public Administration Review, 34:284-293.

San Francisco Public Schools Commission
1976 "School Site Management." Report and recommendations adopted by the San Francisco Public Schools Commission.

Santa Clara Unified School District
1976 "Budget Preparation Handbook." Unpublished document, Santa Clara Unified School District, California.

Schein, Edgar H.
1973 "Management development as a process of influence." In Alton C. Bartlett and Thomas A. Kayser (eds.), Changing Organizational Behaviour: 135-152. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Schick, Allen
1972 "The road to PPB: the stages of budget reform." In Fremont J. Lyden and Ernest G. Miller (eds.), Planning Programming Budgeting. Second edition: 26-52. Chicago: Markham Publishing Company.

Schiff, Martin
1976 "The educational failure of community control in inner-city New York." Phi Delta Kappan, 57(6):375-378.

Schmandt, Henry J.
1972 "Municipal decentralization: an overview." Public Administration Review, 32:571-588.

Schmidt, Stuart M. and Thomas A. Kochan
1972 "Conflict: toward conceptual clarity." Administrative Science Quarterly, 17:359-370.

Scott, William G. and Terrence R. Mitchell
1976 Organization Theory: A Structural and Behavioral Analysis. Homewood, Illinois: Richard D. Irwin, Inc.

Seward, Norman J.
1975 "Centralized and Decentralized School Budgeting." Unpublished Doctoral dissertation, University of California, Berkeley.

Simpkins, William S.
1968 "The Distribution of Decision-making Authority in the School." Unpublished Doctoral dissertation, University of Alberta.

South, Oron
1976 "Diffusing a system." Education and Urban Society, 8(2):183-195.

Staples, I. Ezra (ed.)
1975 Impact of Decentralization on Curriculum: Selected Viewpoints. Washington, D.C.: Association for Supervision and Curriculum Development.

Stevens, Jack
1974 "Community schools." Education Canada, 14(4):11-15.

Stone, Clarke Raymond
1973 "Decentralization and Decision Making: An Analysis of the Perceptions of High School Principals and Central Office Administrators." Unpublished doctoral dissertation, University of Southern California.

Stringham, Bryant L.
1974 "The School Act, 1970: A Case Study of Public Policy Making in Education." Unpublished Doctoral dissertation, University of Alberta.

Taylor, Anson S.
1973 "Reorganization of school board administration structures." Education Canada, 13(4):51-56.

Thayer, Arthur W. and Edward W. Beaubier
1973 Participative Management--Decentralized Decision-making: Working Models. Burlinghame, California: California Association of School Administrators.

Thompson, James D.
1967 Organizations in Action. New York: McGraw-Hill Book Company.

Walker, William G.
1972 "Centralization and Decentralization: An International Viewpoint on an American Dilemma." A report for the Center for Advanced Study of Educational Administration at Oregon University, Eugene.

Walkey, D.
1971 "Decentralization of Equipment Accounts." Report submitted to C. Daneliuk, Assistant Superintendent, Edmonton Public School Board, October 1.

Walton, Richard E.
1972 "Advantages and attributes of the case study." The Journal of Applied Behavioral Science, 8(1):72-78.

Weiss, Sidney
1976 Personal correspondence between Sidney Weiss, Business Manager, Escondido Union School District, California, and the writer.

Weston, J. Fred and Eugene P. Brigham
1975 Managerial Finance. Hinsdale, Illinois: The Dryden Press.

Wildavsky, Aaron
1963 The Politics of the Budgetary Process. Boston: Little, Brown and Company.

1975 Budgeting: A Comparative Theory of Budgetary Processes. Boston: Little, Brown and Company.

Woodward, Joan
1965 Industrial Organization: Theory and Practice. London: Oxford University Press.

Zand, Dale E. and Richard E. Sorenson
1975 "Theory of change and the effective use of management science." Administrative Science Quarterly, 20:532-545.

Zenke, Larry L.
1975 "Toward accountability through decentralization." In I. Ezra Staples (ed.), Impact of Decentralization on Curriculum: Selected Viewpoints: 52-57. Washington, D.C.: Association for Supervision and Curriculum Development.

Zimet, Melvin
1973 Decentralization and School Effectiveness. New York: Teachers' College Press.

APPENDICES

APPENDIX A

FIRST STAGE OF STUDY

QUESTIONNAIRE

THE UNIVERSITY OF ALBERTA

Department of Educational Administration
EDMONTON, ALBERTA, CANADA T6G 2G5 TELEPHONE 432-5241

Telephone: 432-3094

3512 - 117B Street
Edmonton, Alberta
T6J 1W2

November 10, 1976

I am presently engaged in a study of Decentralized School Budgeting in Alberta school jurisdictions. This doctoral study is supported by a special grant from the Alberta School Trustees' Association. The enclosed letter from Mr. S.G. Maertz, Executive Director, outlines the Association's interest and its plans to publish the findings in a special monograph.

The first stage of the study seeks information concerning the decision-making process used in the development of school budgets. I am seeking your assistance in this stage in two ways. Could you please:

1. Complete the enclosed questionnaire, which has been distributed to all superintendents in the province. The estimated time for completion is 20 minutes.
2. Provide copies of policy and procedure which will help me gain an understanding of how budget decisions are made in your system.

A return of this material within two weeks is requested, since the second stage of the study, dependent on the responses to the questionnaire, must begin in early December. A stamped, addressed envelope is enclosed.

Your assistance in this study will be greatly appreciated.

Yours sincerely,

Brian Caldwell

Brian Caldwell

BC/dmm

ALBERTA SCHOOL TRUSTEES ASSOCIATION

311 ROYAL ALEX PLACE, 10106-111 AVENUE
EDMONTON, ALBERTA T5G 0B4
TELEPHONE: 479-1921

November 1, 1976

TO THE SUPERINTENDENT:

The Alberta School Trustees' Association sees a need to obtain a more complete picture than presently exists of the nature, extent and outcomes of budget decentralization in Alberta School Systems. To this end, the Association has provided financial support for the doctoral study conducted by Brian Caldwell, Department of Educational Administration, University of Alberta. The findings of the study will be disseminated to school systems in the province by the ASTA in a specially prepared monograph.

The first stage of the study seeks information concerning the extent to which budget decisions have been decentralized. A short questionnaire to be completed by superintendents will be used to gather data.

We recommend this study to superintendents and encourage your assistance in completing the questionnaire. A high rate of return will ensure that an accurate and detailed picture of budgeting practice is obtained.

Yours very truly,

S G Maertz

Stanley G. Maertz,
Executive Director

SGM/rlw

DECENTRALIZED
SCHOOL BUDGETING STUDY

QUESTIONNAIRE TO SUPERINTENDENTS

THIS STUDY IS SUPPORTED BY A GRANT FROM THE
ALBERTA SCHOOL TRUSTEES' ASSOCIATION

Conducted by
Brian Caldwell
Department of Educational Administration
University of Alberta

Please enclose completed questionnaire in the stamped, addressed envelope. Your assistance in returning the questionnaire WITHIN TWO WEEKS will be greatly appreciated.

SECTION A - SCHOOL SYSTEM CHARACTERISTICS

Please provide the requested data for the month of September 1976, or as of October 1, 1976, whichever is appropriate. Please write your response for each item in the space provided.

		Office Use Only CC
1. NAME OF SYSTEM		1-4
2. NUMBER OF STUDENTS State the number of students in your school system. Do not include those attending evening or Saturday classes.		5-9
3. NUMBER OF SCHOOLS State the number of schools in your system in each of the categories listed below.		
Grades K-6		10-12
7-9		13-14
10-12		15-16
K-9		17-18
7-12		19-20
K-12		21-22
Other (specify)		23-24
Total		25-27
4. NUMBER OF CENTRAL OFFICE PERSONNEL State the total number of persons holding administrative, supervisory, or consultative positions located in central office. Please use full-time equivalents. Do not include support staff.		28-30
5. AREA OF SCHOOL SYSTEM State the approximate area of the school system in square miles.		31-35
6. DISTANCE FROM FURTHEST SCHOOL State the approximate distance in miles from central office to the furthest school in the system.		36-38
7. SIZE OF SCHOOL SYSTEM BUDGET State the number of dollars in the 1976 school system budget.		39-47

ID. Card

1

SECTION B - SCHOOL BUDGET AUTHORITY

PURPOSE This part of the questionnaire seeks information concerning the decision-making process used by your system in the development of school budgets. It focuses specifically on the distribution of authority between central office and the school prior to consideration of the system budget by the Board.

PROCEDURE The following pages provide a list of twenty-seven school budget items grouped in five budget categories. These were derived from the second and first level objects of expenditure, respectively, of the PAB system of classification.

For each item, please select the response which best describes the level at which the decision on the amount to be included in a school budget is made, and the extent of school participation in that decision.

Please choose one of the following responses for each item:

CENTRAL OFFICE DECISION *NO SCHOOL PARTICIPATION*	Central office determines the amount to be included. The school does not usually participate in the decision-making process.
CENTRAL OFFICE DECISION *SCHOOL PARTICIPATION*	Central office determines the amount to be included. The school usually participates by providing statements of needs, preferences and priorities or by making a recommendation on the amount.
SCHOOL DECISION *CENTRAL OFFICE CONFIRMS*	The school determines the amount to be included subject to the limits of a lump-sum allocation. Central office does not usually participate except to provide appropriate checks to ensure conformity with Department of Education regulations and guidelines, existing board policy, and the terms of collective agreements.

Please take the following into consideration in choosing your response:

1. Staff allocations are considered to be budget decisions for the purposes of this study.
2. The "amount" will be the "total number of dollars" except for staff allocations which are "number of persons."
3. If a decision is made by central office for part of an item and by the school for another part, please report the decision for that part which involves the larger amount.
4. Your responses should reflect policy and procedure which apply generally in your school system. Exceptional cases or pilot projects with different patterns of budgeting should be described in the space provided for comments.
5. This part of the questionnaire concerns preparation of the system budget prior to consideration by the board. It can therefore be assumed that all decisions are subject to approval by the board.

EXAMPLE Consider the item "Purchase of textbooks."

Your knowledge of system procedure During budget preparation, each school is advised of a lump-sum allocation determined on a per pupil basis. This amount is for selected services and supplies objects of expenditure. Each school makes the decision on what portion of this lump-sum will be allocated in its budget for the purchase of textbooks.

Your probable response SCHOOL DECISION: CENTRAL OFFICE CONFIRMS, indicated by placing a circle around 3 as illustrated below.

BUDGET CATEGORY	SCHOOL BUDGET ITEM (Amount allocated for)	Central Office Decision No School Participation	Central Office Decision School Participation	School Decision Central Office Confirms
Supplies	Purchase of textbooks	1	2	③

PLEASE CIRCLE THE NUMBER CORRESPONDING TO THE MOST APPROPRIATE RESPONSE

BUDGET CATEGORY	SCHOOL BUDGET ITEM (Amount allocated for)	Central Office Decision No School Participation	Central Office Decision School Participation	School Decision Central Office Confirms	Office Use Only CC
Certificated staff	Number of administrators	1	2	3	48
	Number of classroom teachers	1	2	3	49
	Number of counsellors, teacher-librarians	1	2	3	50
	Use of substitute teachers	1	2	3	51
Non-certificated staff	Number of teachers' aides	1	2	3	52
	Number of secretaries	1	2	3	53
	Number of caretakers	1	2	3	54
	Overtime work by caretakers for school activities	1	2	3	55

SECTION B - SCHOOL BUDGET AUTHORITY

BUDGET CATEGORY	SCHOOL BUDGET ITEM (Amount allocated for)	Central Office Decision No School Participation	Central Office Decision School Participation	School Decision Central Office Confirms	Office Use Only CC
Services	Use of external consultants by school	1	2	3	56
	Postage	1	2	3	57
	Travel and subsistence for staff on school business	1	2	3	58
	Transportation for students on field trips	1	2	3	59
	Maintenance and repair of buildings	1	2	3	60
	Maintenance and repair of equipment	1	2	3	61
	Rental of facilities for school activities	1	2	3	62
	Enrolment fees for staff attending in-service activities	1	2	3	63
	Registration fees for staff attending conferences	1	2	3	64
	Printing of school newsletter	1	2	3	65
	Advertising in local newspaper	1	2	3	66
Supplies	Purchase of instructional supplies	1	2	3	67
	Purchase of textbooks	1	2	3	68
	Purchase of library books	1	2	3	69
	Purchase of audio-visual materials	1	2	3	70
Capital Outlay	Improvements to school grounds	1	2	3	71
	Structural alterations to school buildings	1	2	3	72
	Purchase of equipment	1	2	3	73
	Purchase of furniture	1	2	3	74

SECTION B - SCHOOL BUDGET AUTHORITY

COMMENTS: Do you have additional comments on any matter related to Section B? Include here a brief description of budget practice which represents a significant departure from the general pattern indicated above. Please attach relevant documents if necessary.

SECTION C - OPERATIONAL FLEXIBILITY

PURPOSE This part of the questionnaire seeks information concerning the extent to which schools have discretion to reallocate within and between budget categories following adoption of the system budget by the board.

PROCEDURE You are requested to consider the same budget categories used in Section B; namely, Certificated Staff, Non-certificated Staff, Services, Supplies, and Capital Outlay. The items in Section B illustrated some of the objects of expenditure within these categories.

The table on the following page lists the various transfers which are possible within and between budget categories. Please indicate the extent to which schools have discretion to make such transfers.

Please choose one of the following responses for each type of transfer:

NO DISCRETION	The school has no discretion. Transfers can only be made by central office or the board.
MODERATE DISCRETION	The school has discretion to make transfers within predetermined limits. Transfers beyond these limits can only be made with central office or board approval.
HIGH DISCRETION	The school has discretion to make any transfer within the limits of its budget allocation.

Please take the following into consideration in choosing your response:

1. Your responses should reflect policy and procedure which apply generally for the budget categories concerned and for the school system as a whole. Exceptional cases or pilot projects with different degrees of school discretion should be described in the space provided for comments.
2. Please assume, for all levels of discretion, that appropriate checks are made by central office to ensure that transfers are consistent with Department of Education regulations and guidelines, existing board policy, and the terms of collective agreements.

EXAMPLE Consider a transfer from the "Services" category to the "Supplies" category.

Your knowledge of system procedure	The school may transfer up to 10% of the amount approved by the board for an expenditure in the "Services" category to an expenditure in the "Supplies" category without the prior approval of central office.
Your probable response	MODERATE DISCRETION, indicated by placing a circle around 2 as illustrated below.

BUDGET TRANSFER		OPERATIONAL FLEXIBILITY		
FROM	TO	NO DISCRETION	MODERATE DISCRETION	HIGH DISCRETION
Services	Supplies	1	②	3

SECTION C - OPERATIONAL FLEXIBILITY

PLEASE CIRCLE THE NUMBER CORRESPONDING TO THE MOST APPROPRIATE RESPONSE

BUDGET TRANSFER		OPERATIONAL FLEXIBILITY			Office Use Only CC
FROM	TO	NO DISCRETION	MODERATE DISCRETION	HIGH DISCRETION	
Certificated Staff	*Certificated Staff	1	2	3	75
	Non-Certificated Staff	1	2	3	76
	Services	1	2	3	77
	Supplies	1	2	3	78
	Capital Outlay	1	2	3	79
Non-certificated Staff	Certificated Staff	1	2	3	80
	*Non-certificated Staff	1	2	3	5
	Services	1	2	3	6
	Supplies	1	2	3	7
	Capital Outlay	1	2	3	8
Services	Certificated Staff	1	2	3	9
	Non-certificated Staff	1	2	3	10
	*Services	1	2	3	11
	Supplies	1	2	3	12
	Capital Outlay	1	2	3	13
Supplies	Certificated Staff	1	2	3	14
	Non-certificated Staff	1	2	3	15
	Services	1	2	3	16
	*Supplies	1	2	3	17
	Capital Outlay	1	2	3	18
Capital Outlay	Certificated Staff	1	2	3	19
	Non-certificated Staff	1	2	3	20
	Services	1	2	3	21
	Supplies	1	2	3	22
	*Capital Outlay	1	2	3	23

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			2

*Transfers to other objects within same budget category.

SECTION C - OPERATIONAL FLEXIBILITY

COMMENTS: Do you have additional comments on any matter related to Section C? Include here a brief description of budget practice which represents a significant departure from the general pattern indicated above. Please attach relevant documents if necessary.

SECTION D - BUDGET SURPLUS AND DEFICIT

PURPOSE This part of the questionnaire seeks information concerning the extent to which system policy provides for a school to carry an operating surplus or deficit the following budget year.

PROCEDURE Please indicate your response by checking the appropriate space, thus ☑

Office Use Only CC

1. SURPLUS

To what extent does policy provide for a school to carry forward a surplus of funds for an item in its budget?

1. For no items ☐
2. A limited amount for some items ☐
3. The total amount for some items, limited or none for others ☐
4. A limited amount for all items ☐
5. The total amount for all items ☐

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2. DEFICIT

To what extent does policy provide for a school to carry forward a deficit of funds for an item in its budget?

1. For no items ☐
2. A limited amount for some items ☐
3. The total amount for some items, limited or none for others ☐
4. A limited amount for all items ☐
5. The total amount for all items ☐

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COMMENTS: Do you have additional comments on any aspect of Section D?

SECTION E - DECENTRALIZED SCHOOL BUDGETING

PURPOSE Several school systems in Alberta have recently adopted policies and procedures which significantly increased the degree of budget authority located at the school level. Such practices have been described as forms of decentralized school budgeting or school based budgeting. The purpose of this section is to determine whether your system has implemented such a practice.

PROCEDURE Please indicate your response by checking the appropriate space, thus ☑

Office Use Only CC

1. IMPLEMENTATION

Has your system implemented a form of decentralized school budgeting as described above?

1. No ☐
2. Yes: for part of the system ☐
3. Yes: for whole system ☐

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2. IF "YES" FOR QUESTION 1

For which budget year was decentralized school budgeting implemented in your system?

1. 1976 ☐
2. 1975 ☐
3. 1974 ☐
4. 1973 ☐
5. Before 1973 ☐

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3. IF "NO" FOR QUESTION 1

To what extent has a form of decentralized school budgeting been considered by your system?

1. Not considered ☐
2. Considered but rejected ☐
3. Currently under consideration ☐
4. Considered and will be implemented on a pilot basis before a decision on system-wide adoption is made. ☐
5. Considered and will be implemented on a system-wide basis. ☐

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SECTION E - DECENTRALIZED SCHOOL BUDGETING

COMMENTS: Do you have additional comments on matters related to Section E? Please elaborate where appropriate on your response to Questions 1 and 3.

SECTION F - STATEMENTS OF POLICY AND PROCEDURE

You are requested to provide copies of policy and procedure which will help the researcher gain an understanding of the process used by your system in the development of school budgets.

YOUR ASSISTANCE WITH THIS STUDY IS APPRECIATED

APPENDIX B

FIRST STAGE OF STUDY

POLITICAL-LEGAL CONSTRAINTS

LETTERS AND INTERVIEW GUIDE

THE UNIVERSITY OF ALBERTA

Department of Educational Administration
EDMONTON, ALBERTA, CANADA T6G 2G5 TELEPHONE 432-5241

Telephone: 432-3094 (office)
435-0257 (home)
3512 - 117 B Street,
Edmonton, Alberta
T6J 1W2

January 19, 1977

Dr. Bryant Stringham
Director
Field Services Branch
Department of Education
Executive Building
Jasper Avenue & 109 Street
Edmonton, Alberta.

Dear Dr. Stringham:

I am presently engaged in an investigation of decentralized school budgeting in Alberta. The enclosed document outlines the nature of the study and indicates the progress made to date.

I am writing to seek your assistance in the study. Could you please advise me of persons in your Branch who can respond to questions I have concerning the implications of provincial legislation and regulations in the area under investigation. I would like to meet with these persons for an estimated 45 minutes. The last week of January is the best time for such a meeting as far as the study is concerned.

I will be most grateful for your help in the study. I hope that the results of the investigation will be of interest and value to the Department.

Yours very truly,

Brian Caldwell

BC/dmm
encl:

DEPARTMENT OF EDUCATION

INTERVIEW GUIDE

The following guide was adopted for an interview with a spokesperson for the Department of Education.

Provincial Statutes and Regulations

1. Which provincial statutes relate directly or indirectly to decentralized school budgeting?
2. Which regulations under the purview of the Department of Education relate directly or indirectly to decentralized school budgeting?

Problems

1. What problems and concerns related to decentralized school budgeting have been brought to the attention of the Department of Education?

Future

1. What future developments does the Department of Education see with respect to decentralized school budgeting?

THE UNIVERSITY OF ALBERTA

Department of Educational Administration
EDMONTON, ALBERTA, CANADA T6G 2G5 TELEPHONE 432-5241

Telephone: 432-3094 (office)
435-0257 (home)
3512 - 117 B Street
Edmonton, Alberta
T6J 1W2

January 19, 1977

Dr. B.T. Keeler,
Executive Secretary
Alberta Teachers' Association
11010 - 142 Street
Edmonton, Alberta

Dear Dr. Keeler:

I am presently engaged in an investigation of decentralized school budgeting in Alberta. The enclosed document outlines the nature of the study and indicates the progress made to date.

I am writing to seek your assistance in the study. Could you please

1. Provide copies of policy statements, position papers, minutes and other materials prepared by The Alberta Teachers' Association which might relate to the study, and

2. Arrange for me to meet with an officer or member of staff who can elaborate on the above documents and respond to related questions? The estimated length of such a meeting would be 45 minutes. The last week in January is the best time for such a meeting as far as the study is concerned.

I have written to Mr. Bill Sommerfeld, President of the Edmonton Public School Board Local seeking his assistance in the context of the Association's interest in the Edmonton pilot project in school based budgeting. I have enclosed a copy of my letter to him.

I will be most grateful for your assistance in this study. I hope that the results of the investigation will be of interest and value to the Association.

Yours very truly,

Brian Caldwell.

BC/dmm
encls:

cc: Mr. W. Sommerfeld

THE ALBERTA TEACHERS' ASSOCIATION

INTERVIEW GUIDE

The following guide was adopted for an interview with a spokesperson for the Association.

Policies

1. What policies of the Association relate directly or indirectly to decentralized budgeting?
2. What position has the Association taken toward recent trends in decentralized school budgeting?

Collective Bargaining

1. Has decentralized school budgeting or its consequences been an issue in collective bargaining?
2. Have collective agreements been negotiated which limit the extent to which authority to make decisions may be delegated to the school?

Problems

1. What problems and concerns related to decentralized school budgeting have been brought to the attention of the Association?

Preferred Degree of Decentralization

1. In what areas of the school budget does the Association perceive its members supporting decentralized school budgeting?
2. In what areas of the school budget does the Association perceive its members opposing decentralized school budgeting?

Future

1. What future developments does the Association see with respect to decentralized school budgeting?

THE UNIVERSITY OF ALBERTA

Department of Educational Administration
EDMONTON, ALBERTA, CANADA T6G 2G5 TELEPHONE 432-5241

Telephone: 432-3094 (office)
435-0257 (home)
3512 - 117 B Street
Edmonton, Alberta
T6J 1W2

January 19, 1977

Mr. Stanley G. Maertz
Executive Director
Alberta School Trustees' Association
311, 10106 - 111 Avenue
Edmonton, Alberta

Dear Mr. Maertz:

My investigation of decentralized school budgeting in Alberta which is supported by a grant from the Alberta School Trustees' Association, is now in progress. The enclosed document outlines the nature of the study and indicates the progress made to date.

I am writing to seek your assistance in the study. Could you please:

1. Provide copies of policy statements, position papers, minutes and other materials prepared by the Association which might relate to the study, and

2. Arrange for me to meet with an officer or member of staff who can elaborate on the above documents and respond to related questions? The estimated length of such a meeting would be 45 minutes. The last week of January is the best time for such a meeting as far as the study is concerned.

I will be most grateful for your help in this matter. The assistance provided to date by the Association has been invaluable.

Yours very truly,

Brian Caldwell

BC/dmm
encl:

ALBERTA SCHOOL TRUSTEES' ASSOCIATION

The Executive Director of the ASTA advised that the Association had no policy related to decentralized school budgeting. He indicated that the general lack of information was one of the reasons the ASTA gave financial support to the study. No formal interview was conducted with a spokesperson for the Association.

APPENDIX C

SECOND STAGE OF STUDY

INTERVIEW SCHEDULES

SYSTEMS OTHER THAN EDMONTON PUBLIC

PART A

Except as indicated in Chapter 4, all respondents provided answers to the following questions.

PERSONAL INFORMATION

Experience

How many years of experience have you had in the positions listed? Please give details in each instance.

1. In your present position.
2. In other administrative or supervisory positions in this system.
3. Altogether in this school system.
4. In administrative or supervisory positions in other systems.
5. Altogether in education.

Education

1. What is the highest level of education you have attained?
2. Have you taken courses related to budgeting or finance in degree or diploma programs?
3. Have you participated in in-service or similar programs related to budgeting or finance?

OBJECTIVES

1. What are the objectives, as you perceive them, of decentralized school budgeting in this system?

FACTORS UNDERLYING THE ADOPTION OF DECENTRALIZED SCHOOL BUDGETING

1. What factors operating inside the school system contributed to or promoted the adoption of the practice?

2. What factors operating outside the school system contributed to or promoted the adoption of the practice?

ADOPTION AND OPERATION

Different questions were prepared for superintendents, other central office personnel, and principals. These are contained in Part B.

DISAGREEMENTS ON MATTERS RELATED TO SCHOOL BUDGETING

1. Consider those persons with whom you work on matters related to school budgeting.

   (a) How frequently are you engaged in disagreements with these persons on matters related to school budgeting?

   (b) Give an example of the kind of disagreement which occurs in each instance.

Persons	Frequency of Disagreements			
	Often	Occasionally	Seldom	Never

2. Do the disagreements described in Question 1 tend to be more frequent, less frequent, or do they tend to occur with the same frequency as before decentralized school budgeting was implemented?

3. Do the disagreements described in Question 1 tend to be more severe, less severe, or do they tend to have the same severity as before decentralized school budgeting was implemented?

Persons	Effect of Decentralization					
	Frequency			Severity		
	Less Frequent	More Frequent	No Difference	Less Severe	More Severe	No Difference

OBJECTIVES

Here is a list of objectives frequently associated with decentralized school budgeting. Please indicate the VALUE you attach to each and the PROGRESS you believe has been made toward attainment in this school system.

Objective	Criterion	Evaluation					
		None	Little	Some	Much	Great	Don't Know
To provide the principal with an appropriate role in the decision-making process for the allocation of funds	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5
To provide teachers with an appropriate role in the decision-making process for the allocation of funds	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5
To provide a more equitable allocation of funds among schools	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5
To obtain more efficient use of funds allocated to each school	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5
To provide schools with greater flexibility in the development of the instructional program	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5
To encourage school and teacher innovativeness	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5
To reduce the time required to meet changing school needs	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5
To encourage and facilitate examination of the relationship between program objectives, program outcomes and the costs involved.	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5

Objective	Criterion	None	Little	Some	Much	Great	Don't Know
Please add and evaluate other objectives which you consider are relevant							
1.	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5
2.	VALUE	0	1	2	3	4	5
	PROGRESS	0	1	2	3	4	5

CHANGES

1. What changes would you like to see in the authority schools have to make budget allocations prior to the adoption of the system budget by the Board?
2. What changes would you like to see in the discretion schools have to transfer funds within their budgets following adoption of the system budget by the Board?
3. What changes would you like to see in the extent to which schools can carry an operating surplus or deficit to the following year?
4. What changes would you like to see in other aspects of school budgeting?

FUTURE

1. Where would you like to see this system in five years' time in respect to decentralized school budgeting?

YOUR GENERAL EVALUATION OF THE PRACTICE

1. Indicate the extent of your satisfaction with decentralized school budgeting in your system at this time.

Highly satisfied ☐

Moderately satisfied ☐

Slightly satisfied ☐

Slightly dissatisfied ☐

Moderately dissatisfied ☐

Highly dissatisfied ☐

Neutral ☐

OTHER COMMENTS

1. Do you have additional comments on any matter related to the objectives, adoption, operation and outcomes of decentralized school budgeting?

PART B

The following questions were asked to different groups of respondents for matters related to the adoption and operation of decentralized school budgeting.

SUPERINTENDENTS

DECENTRALIZATION PRACTICE

1. Is decentralized school budgeting part of a more general policy or practice designed to increase authority at the school level in this system?

2. In which other major decision areas has there recently been an increase in authority at the school level?

ADOPTION PROCESS

1. Describe the events leading from the awareness of a need for change to the decision to adopt the practice on a system-wide basis:

    (a) Persons involved--central office, school, other
    (b) Observation of practice in other systems
    (c) Study of practice described in the literature
    (d) Pilot project
    (e) Decision to adopt
    (f) Chronology of events

2. What changes were made in organizational structure or personnel to implement decentralized school budgeting--at central office, in schools?

3. Describe the procedures employed to install the practice on a system-wide basis:

    (a) In-service for central office and school personnel
    (b) Budget handbooks and guidelines
    (c) Persons involved--central office, school, other
    (d) Chronology of events

4. What problems were encountered in implementing the practice by:

    (a) You
    (b) Other central office personnel
    (c) Principals
    (d) Other school personnel
    (e) Trustees

OPERATION

Budget Preparation

1. Describe the procedures used in the preparation of school budgets:

    (a) Calendar
    (b) Guidelines and forms
    (c) Involvement and responsibility of central office personnel
    (d) Involvement and responsibility of school personnel
    (e) Review, approval and confirmation of school budgets

2. How do the various procedures and roles differ from those before decentralized school budgeting was implemented?

3. How do the various procedures and roles differ from those established in the first year of operation of decentralized school budgeting?

Budget Administration

1. Describe the procedures used in the administration of school budgets:
    (a) Transferring funds from one category of a school budget to another
    (b) Carrying forward to the following year a surplus or deficit in a school budget
    (c) Purchasing
    (d) Control of expenditure by central office and school
    (e) Information provided by central office to schools on expenditures

2. How do the various procedures and roles differ from those before decentralized school budgeting was implemented?

3. How do the various procedures and roles differ from those established in the first year of operation of decentralized school budgeting?

Problems

1. What problems have been encountered in the operation of decentralized school budgeting by:
    (a) You
    (b) Other central office personnel
    (c) Principals
    (d) Other school personnel
    (e) Trustees

OUTCOMES

1. What was the effect of decentralized school budgeting on the amount of time you spent on the tasks listed in the table?

Task	Effect of Decentralization		
	More Time	Same Time	Less Time
Preparation of system budget	1	2	3
Preparation of school budgets	1	2	2
Administration of system budget	1	2	3
Administration of school budgets	1	2	3

CENTRAL OFFICE PERSONNEL

ADOPTION PROCESS

1. Describe your role in the events leading from the awareness of a need for change to the decision to adopt the practice on a system-wide basis.

2. Describe your role in installing the practice on a system-wide basis.

3. What problems were encountered in implementing the practice by:

    (a) You
    (b) Other central office personnel
    (c) Principals
    (d) Other school personnel

OPERATION

Budget Preparation

1. Describe your role in the preparation of school budgets.

2. How does your current role differ from that before decentralized school budgeting was implemented?

3. How does your current role differ from that established in the first year of operation of decentralized school budgeting?

Budget Administration

1. Describe your role in the administration of school budgets.

2. How does your current role differ from that before decentralized school budgeting was implemented?

3. How does your current role differ from that established in the first year of operation of decentralized school budgeting?

Problems

1. What problems have been encountered in the operation of decentralized school budgeting by:

    (a) You
    (b) Other central office personnel
    (c) Principals
    (d) Other school personnel

OUTCOMES

1. What was the effect of decentralized school budgeting on the amount of time you spent on the tasks listed in the table?

Task	Effect of Decentralization		
	More Time	Same Time	Less Time
Preparation of system budget	1	2	3
Preparation of school budgets	1	2	3
Administration of system budget	1	2	3
Administration of school budgets	1	2	3

PRINCIPALS

THE SCHOOL

1. Grades at school.
2. Number of students enrolled.
3. Number of teachers.

ADOPTION PROCESS

1. Describe your role in the events leading from the awareness of a need for change to the decision to adopt the practice on a system-wide basis.
2. What changes were made in organizational structure or personnel at your school to implement decentralized school budgeting?
3. Describe the procedures employed to install the practice in your school:
    - (a) In-service for school personnel
    - (b) Budget handbooks and guidelines developed in your school
    - (c) Persons involved: school, other
    - (d) Chronology of events

4. What problems were encountered in implementing the practice by:
    - (a) You
    - (b) Other school personnel
    - (c) Superintendent
    - (d) Other central office personnel

OPERATION

Budget Preparation

1. Describe the procedures used in the preparation of your school budget:
    - (a) Calendar
    - (b) Guidelines and forms
    - (c) Involvement and responsibility of school personnel
    - (d) Involvement and responsibility of central office personnel
    - (e) Review, approval and confirmation of school budget

2. How do the various procedures and roles differ from those before decentralized school budgeting was implemented?

3. How do the various procedures and roles differ from those established in the first year of operation of decentralized school budgeting?

Budget Administration

1. Describe procedures used in the administration of your school budget:
    - (a) Transferring funds from one category of the school budget to another
    - (b) Carrying forward to the following year a surplus or deficit in the school budget
    - (c) Purchasing
    - (d) Control of expenditure
    - (e) Information provided by central office to the school on expenditures

2. How do the various procedures and roles differ from those before decentralized school budgeting was implemented?

3. How do the various procedures and roles differ from those established in the first year of operation of decentralized school budgeting?

Problems

1. What problems have been encountered in the operation of decentralized school budgeting by:

    (a) You
    (b) Other school personnel
    (c) Superintendent
    (d) Other central office personnel

OUTCOMES

Time Spent on Budgeting

1. What was the effect of decentralized school budgeting on the amount of time spent on budget preparation by the persons listed in the table?

	Effect of Decentralization			
Persons	More Time	Same Time	Less Time	N/A
Principal				
By self	1	2	3	4
With school personnel	1	2	3	4
With central office personnel	1	2	3	4
Other School Personnel				
Assistant Principals	1	2	3	4
Department Heads	1	2	3	4
Teachers	1	2	3	4
Business Manager	1	2	3	4
Secretaries	1	2	3	4
Others	1	2	3	4

Time Spent on Purchasing

1. What was the effect of decentralized school budgeting on the amount of time spent on purchasing by the persons listed in the table?

Persons	Effect of Decentralization			
	More Time	Same Time	Less Time	N/A
Principal	1	2	3	4
Assistant Principals	1	2	3	4
Department Heads	1	2	3	4
Teachers	1	2	3	4
Business Manager	1	2	3	4
Secretaries	1	2	3	4
Others	1	2	3	4

Time Spent on Record-Keeping

1. What was the effect of decentralized school budgeting on the amount of time spent on record-keeping by the persons listed in the table?

Persons	Effect of Decentralization			
	More Time	Same Time	Less Time	N/A
Principal	1	2	3	4
Assistant Principals	1	2	3	4
Department Heads	1	2	3	4
Teachers	1	2	3	4
Business Managers	1	2	3	4
Secretaries	1	2	3	4
Others	1	2	3	4

EDMONTON PUBLIC PILOT PROJECT

An abbreviated form of the schedule was used in Edmonton Public where the practice is known as school-based budgeting. Details of the methodological constraints of the collection of data in this system are contained in Chapter 12.

PART A

Except as indicated in Chapter 4, all respondents provided answers to the following questions.

PERSONAL INFORMATION

Experience

How many years of experience have you had in the positions listed?

1. In your present position.
2. In other administrative or supervisory positions in this system.
3. Altogether in this school system.
4. In administrative or supervisory positions in other systems.
5. Altogether in education.

Education

1. What is the highest level of education you have attained?
2. Have you taken courses related to budgeting or finance in degree or diploma programs?
3. Have you participated in in-service or similar programs related to budgeting or finance?

OBJECTIVES

1. What are the objectives, as you perceive them, of school-based budgeting in this system?

FACTORS INFLUENCING THE ADOPTION OF SCHOOL-BASED BUDGETING

1. What factors operating inside the school system contributed to or promoted the adoption of the practice?

2. What factors operating outside the school system contributed to or promoted the adoption of the practice?

ADOPTION AND OPERATION

Different questions were prepared for the Superintendent, other central office personnel, and principals. These are contained in Part B.

FUTURE

1. Where would you like to see Edmonton Public in five years' time in respect to school-based budgeting?

OTHER COMMENTS

1. Have you additional comments to make on matters related to the objectives, adoption, implementation and future of school-based budgeting?

PART B

The following questions were asked to different groups of respondents for matters relating to the adoption and operation of decentralized budgeting. The Superintendent designated the System Planner as the person to answer those questions set out for Superintendents in Part B of the interview schedule used in other systems.

SUPERINTENDENT

DECENTRALIZED PRACTICE

1. Is school-based budgeting part of a more general policy or practice designed to increase authority at the school level in this system?

2. In which other major decision areas has there recently been an increase in authority at the school level?

ADOPTION PROCESS

1. Describe the events leading from the awareness of a need for change to the decision to implement a pilot project:

   (a) Persons involved--central office, school, other
   (b) Observation of practice in other systems
   (c) Study of practice described in the literature
   (d) Decision
   (e) Chronology of events

PILOT PROJECT

Involvement

1. What criteria and procedures were used to select the pilot schools?

Budget Preparation

1. Describe your role in the preparation of the budgets in the pilot schools.

2. How does this differ from your role in the preparation of budgets in other schools?

3. What changes do you plan for your role in the preparation of budgets in the pilot schools in 1977-78?

Budget Administration

1. Describe your role in the administration of the budgets in the pilot schools.

2. How does this differ from your role in the administration of budgets in other schools?

3. What changes do you plan for your role in the administration of budgets in the pilot schools in 1977-78?

Problems

1. What problems have been encountered in the pilot project by:

   (a) You
   (b) Other central office personnel--System Planner, Assistant and Associate Superintendents and their staffs
   (c) Trustees
   (d) Principals
   (e) Other school personnel

FUTURE

1. What is the planned duration of the pilot project?

2. What procedures and criteria will be used to evaluate the pilot project?

OTHER CENTRAL OFFICE PERSONNEL

ADOPTION PROCESS

1. Describe your role in the events leading from the awareness of a need for change to the decision to implement a pilot project.

PILOT PROJECT

Budget Preparation

1. Describe your role in the preparation of the budgets in the pilot schools.

2. How does this differ from your role in the preparation of budgets in other schools?

3. What changes are proposed for your role in the preparation of budgets in the pilot schools in 1977-78?

Budget Administration

1. Describe your role in the administration of budgets in the pilot schools.

2. How does this differ from your role in the administration of budgets in other schools?

3. What changes are proposed for your role in the administration of budgets in the pilot schools in 1977-78?

Problems

1. What problems have been encountered in the pilot project by:

   (a) You
   (b) Other central office personnel
   (c) Principals
   (d) Other school personnel

FUTURE

1. In your judgment, what should be the duration of the pilot project?
2. What criteria should be established to evaluate the pilot project?

PRINCIPALS

THE SCHOOL

1. Grades at school.
2. Number of students enrolled.
3. Number of teachers.

ADOPTION PROCESS

1. Describe your role in the events leading from the awareness of a need for change to the decision to implement a pilot project.

PILOT PROJECT

Involvement

1. Why did your school apply for participation in the pilot project?
2. Which persons at your school participated in the decision to apply?

Budget Preparation

1. Describe the procedures used in the preparation of your school budget:

   (a) Calendar
   (b) In-service for principal, teachers and others
   (c) Guidelines and forms developed for use in your school
   (d) Involvement and responsibility of school personnel
   (e) Involvement and responsibility of central office personnel
   (f) Review, approval and confirmation of school budget

2. How do the various procedures and roles differ from those before school-based budgeting was implemented?
3. Do you plan changes in these procedures and roles in preparing the 1977-78 budget?

Budget Administration

1. Describe the procedures used in the administration of your school budget:

   (a) Transferring funds from one category of the school budget to another
   (b) Purchasing
   (c) Control of expenditure
   (d) Information provided by central office to the school on expenditure

2. How do the various procedures and roles differ from those before school-based budgeting was implemented?

3. Do you plan changes in these procedures and roles in administering the 1977-78 budget?

Effects

1. In what ways has school-based budgeting enabled you to do things which would not have been possible under the former system of budgeting?

Problems

1. What problems have been encountered in the pilot project by:

   (a) You
   (b) Other school personnel
   (c) Superintendent
   (d) Other central office personnel

FUTURE

1. In your judgment, what should be the duration of the pilot project?

2. What criteria should be established to evaluate the pilot project?

APPENDIX D

SYSTEMS WITH DECENTRALIZED SCHOOL BUDGETING

Systems with Decentralized School Budgeting in 1976

Type of Decentralization[a]	Type of System[b]			
	Divisions	Counties	Public Districts	Separate Districts
School Budget Authority and Operational Flexibility	Calgary	Ponoka Smoky Lake	Bow Corridor Regional Calgary Camrose Jasper Lethbridge	Camrose Edmonton Sherwood Park
School Budget Authority Only	Cardston Crownest Foothills Neutral Hills Taber Willow Creek	Athabasca Flagstaff Lac St. Anne Newell Paintearth Parkland Red Deer Strathcona Warner	Red Deer St. Paul Regional Swan Hills Wetaskiwin	Beaverlodge Fort McMurray Grande Prairie Lethbridge Red Deer Sexsmith St. Thomas More Theresetta

[a] School Budget Authority: School decisions made on allocations for eleven or more of the twenty-seven items in the SBA Scale (the top twenty-nine percent of systems).

Operational Flexibility: Schools have high discretion to make four or more transfers of the twenty-five listed in the OF Scale (the top twenty-six percent of systems).

[b] Underlined--Selected for pilot test of interview guides.
Underlined--Selected for inclusion in second stage of study.

Systems with Decentralized School Budgeting in 1976 (cont.)

Type of Decentralization[a]	Type of System[b]			
	Divisions	Counties	Public Districts	Separate Districts
Operational Flexibility Only	Acadia	Vulcan	Devon	Assumption
	East Smoky		Stirling	Bow Island
	High Prairie		Thibault Catholic	Calgary
	Northland			Coaldale
	Pincher Creek			Drayton Valley
	Three Hills			Fort Saskatchewan
	Westlock			Ponoka
				St. Michael's
				Taber
				Westlock
				Wetaskiwin
				Whitecourt

[a] School Budget Authority: School decisions made on allocations for eleven or more of the twenty-seven items in the SBA Scale (the top twenty-nine percent of systems).

Operational Flexibility: Schools have high discretion to make four or more transfers of the twenty-five listed in the OF Scale (the top twenty-six percent of systems).

[b] Underlined--Selected for pilot test of interview guides.
Underlined--Selected for inclusion in second stage of study.

YELLOWHEAD SCHOOL DIVISION

Except for the pilot project in Edmonton Public, the practice in Yellowhead School Division represented the highest degree of decentralized school budgeting in Alberta in 1977. A decision was made not to include Yellowhead in the study because the change had not been implemented at the time the selection was made. The Superintendent provided the researcher with the following information.

Practice in 1976

Schools were allocated a mini-budget of approximately $45 per pupil for expenditure in selected services purchased, supplies and equipment accounts.

Practice in 1977

Effective January 1, 1977, all schools budgeted on the following basis:

Revenue.

1. $1,000 per student
2. $12,500 for each Special Education position
3. Funds for contracted services such as EOF, French language instruction, service to other schools
4. Supplementary transportation grant of $3 per pupil
5. Text rental and fees
6. Small school grant of $60 per pupil for schools with fewer than 250 pupils
7. Very small school grant of $160 per pupil for schools with fewer than 75 pupils
8. Reading material grant of $2 per elementary pupil

Expenditure.

1. Certificated staff charged at $18,500 for 1977
2. Non-certificated staff (excluding caretakers) charged at $5 per hour for 1977

3. Substitute teachers for short absences at $40 per day
4. Selected services purchased and supplies accounts

Comparison of Questionnaire Responses

Type of Decentralization	Degree of Decentralization 1976	Degree of Decentralization 1977
School Budget Authority	9	18
Operational Flexibility		
Moderate discretion	2	0
High discretion	0	25